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A  
T R E A T I S E  
ON THE  
THEORY AND PRACTICE  
OF  
M I D W I F E R Y,  
TO WHICH IS NOW ADDED,  
A SET OF ANATOMICAL PLATES,  
EXHIBITING  
*THE VARIOUS CASES THAT OCCUR IN PRACTICE,*  
ACCURATELY ENGRAVED, WITH EXPLANATIONS.

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By W. SMELLIE, M. D.

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A NEW AND CORRECTED EDITION, IN THREE PARTS.

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## P R E F A C E.

**I** AT first intended to have published this Treatise in different lectures, as they were delivered in one course of midwifery; but I found that method would not answer so well, in a work of this kind, as in teaching; because, in the course of my lectures, almost every observation has a reference to the working of those machines which I have contrived to resemble and represent real women and children; and on which all the kinds of different labours are demonstrated, and even performed, by every individual student.

I have, therefore, divided the whole into an Introduction and four Books, distinguished by Chapters, Sections, and Numbers; and have industriously avoided all theory, except so much as may serve to whet the genius of young practitioners, and be as hints to introduce more valuable discoveries in the art.

The Introduction contains a summary account of the Practice of Midwifery, both among the ancients and moderns, with the improvements which have been hitherto made in it; and this I have exhibited for the information of those who have not had time or opportunity to peruse the books from which it is collected; that, by seeing at once the whole extent of the art, they may be the more able to judge for themselves, and regulate their practice by those authors who have written most judiciously upon the subject. The knowledge of these things will also help to raise a laudable spirit of emulation, that never fails to promote useful enquiries; which often redound to the honour of art, as well as to the advantage of society!

Though I have endeavoured to treat every thing in the most distinct and concise manner, perhaps many directions that occur in the third book may be thought too minute and trivial by those who have already had the advantage of an extensive practice; but the work being principally undertaken with a view to refresh the memory of those who have attended me, and for the instruction of young practitioners in general, I thought it was necessary to mention every thing that might be useful in the course of practice.

At first, my design was to have inserted cases, by way of illustration, according to the method of La Motte; but, upon further deliberation, I thought such a plan would too much embarrass the student in the progress of his reading: and therefore I have, in imitation of Mauriceau, published a second volume of histories digested into a certain number of classes or collections, with proper references to the particular parts of this Treatise; so that the reader, when he wants to see the illustration, may turn over to it at his leisure, according to the directions in this edition, which will demonstrate and explain what otherwise might not be so well understood.

The Collections or classes consist of the most useful cases and observations, partly culled from the most approved authors, but chiefly collected from my own practice, and that of my correspondents and former pupils, by whom I have been consulted. They comprehend the variety of methods practised

in lingering and laborious cases, which occur much oftener than the preternatural, and are more apt to puzzle and perplex a young practitioner.

In order to render the performance still more complete, I have taken, from authors of the best authority, a few extraordinary cases which seldom occur, as well as borrowed some medical transactions from the most approved modern physicians.

From the instances of natural and tedious labours, the young practitioner will learn how to behave in the like occurrences; and, above all things, to beware of being too hasty in offering assistance, while nature is of herself able to effectuate the delivery.

Among the laborious cases, he will find a variety of examples, by which he will know when it is absolutely necessary to use the forceps.

The unsuccessful cases communicated by correspondents, who desired their names might be concealed, are inserted as so many beacons to caution others from falling into the same errors and mistakes in the course of practice.

Nor will the reader, I hope, imagine that such a fund will be insufficient for the purpose, or that this Treatise is cooked up in a hurry, when I inform him, that above six years before its publication I began to commit my lectures to paper; and from time to time altered, amended, and digested what I had written according to the new lights I received from study and experience. Neither did I pretend to teach midwifery till after I had practised it successfully for a long time in the country; and the observations I now publish are the fruits not only of that opportunity, but more immediately of my practice in London during ten years, in which I have given upwards of two hundred and eighty courses of midwifery, for the instruction of more than nine hundred pupils, exclusive of female students; and in that series of courses one thousand one hundred and fifty poor women have been delivered in presence of those who attended me (and supported during their lying-in by the stated collections of my pupils) over and above those difficult cases to which we are often called by midwives, for relief of the indigent.

These considerations, together with that of my own private practice, which hath been pretty extensive, will, I hope, screen me from the imputation of arrogance with regard to the task I have undertaken; and I flatter myself that the performance will not be unserviceable to mankind.

In this Treatise are introduced copper-plate engravings of the most useful instruments appertaining to the art of midwifery; together with a variety of figures relating to anatomy and delivery, with explanatory tables; and in this edition proper references have been made to the several figures.



# INTRODUCTION.

**I**T must be a satisfaction to those who begin the study of any art or science, to be made acquainted with the rise and progress of it ; and therefore, I shall, by way of introduction, give a short detail of the practice of midwifery, with the improvements which have been made in it at different times, as I have been able to collect the circumstances, from those authors, ancient as well as modern, who have written on the subject.

By these accounts it seems probable, that in the first ages the practice of this art was altogether in the hands of women, and that men were never employed but in the utmost extremity ; indeed it is natural to suppose, that while the simplicity of the early ages remained, women would have recourse to none but persons of their own sex in diseases peculiar to it ; accordingly, we find that in Egypt midwifery was practised by women.

Hyginus relates, that in Athens a law was made, prohibiting women and slaves from practising physic in any shape ; but the mistaken modesty of the sex rendered it afterwards absolutely necessary to allow free women the privilege of sharing the art with the men.

In the *Harmonia Gynæciorum*, there are extant several directions and recipes on the subject of midwifery, collected from the writings of one Cleopatra, interspersed with those of Moschion and Priscian ; and some people imagine this was no other than the famous Cleopatra, queen of Egypt, because in the preface Arsinoe is mentioned as the author's sister.

Galen, who lived two hundred years after this Egyptian queen, advises the reader to consult the writings of one of that name, but does not inform us whether she was or was not that celebrated princess ; so that in all probability it was some other person of the same name, as the study and exercise of such an art was not at all suited to the disposition of such a voluptuary as queen Cleopatra is described to have been.

Ætius transcribes some chapters from the works of one Aspasia, touching the method of delivering and managing women in natural labours ; but gives no account of the place of her residence, nor of the time in which she wrote. Several other female practitioners are mentioned by different historians, but as none of their writings are extant, and the accounts given of them are mostly fabulous and foreign to our purpose, I shall forbear to mention them in this place ; and referring the curious to Le Clerc's *History of Physic*, begin with Hippocrates, the most ancient writer now extant upon our subject, who may be styled the *father of midwifery*, as well as *medicine* ; because all the succeeding authors, as far down as the latter end of the sixteenth century, have copied from his works the most material things relating to the diseases of women and children, as well as to the obstetric art. I shall therefore give a succinct account of his practice ; and in my detail of the other authors, only observe the improvements they have made, and the circumstances in which they have deviated from his method and opinion.

Hippocrates, who practised medicine in Greece, about 460 years before the Christian æra, no doubt availed himself of the observations of those who went before him in the exercise of the same profession. He acquired the highest reputation by his wise predictions and successful practice, and by his uncommon sagacity and experience, greatly improved the healing art.

In his book, *De Natura Muliebri*, and those *De Mulierum Morbis*, he mentions and describes several diseases peculiar to the female sex, according to the theory of those times, and prescribes more medicines for the diseases of women than for any other distempers.

Many of his remedies, indeed, are very strange and uncouth; but a number of them are still accounted excellent in the present practice, unless his names of them have been mistaken, and misapplied to other medicines; and although his theory is frequently odd and erroneous, his diagnostics, prognostics, and method of cure, are often just and judicious.

In suppressions of the menses, he first of all orders vomits and purges, then sharp pessaries in form of suppositories, composed of lint or wool; with divers kinds of deobstruent powders, wax and oil, to be introduced into the vagina; he likewise prescribes fumigations, fomentations, and hot baths, together with internal medicines. He observes, that such obstructions produce a pain and seeming weight in the lower part of the abdomen, extending to the loins and ilia, attended with a vomiting at intervals, and longings like those of a pregnant woman. If these symptoms of pain and weight affect the hypochondria, producing suffocation and pain in the head and neck, the patient is to be relieved by the application of foetid things to the nose, with castor and flea-bane given internally in wine, &c.

When the menses flow in too great a quantity, he proposes a contrary method; he advises her to abstain from bathing and all laxative and diuretic things; orders astringent pessaries for the vagina, and cold applications to the lower parts; prescribes internally several kinds of astringent medicines, with the peplum, or poppy-seed, and cupping-glasses to be applied to the breasts. When the violence of this discharge is abated, he proposes purges and vomits, then asses-milk and a nourishing diet, and various kinds of internal and external medicines.

In a *fluor albus*, he says the urine is like that of an ass; the patient labours under a pain in the lower part of the abdomen, loins, and ilia, together with a swelling in the hands and legs; her eyes water, her complexion becomes wan and yellow; and in walking she is oppressed with a difficulty of breathing; in this case he prescribes emetics and cathartics, asses-milk, whey, fomentations, and different kinds of medicines, to deterge and strengthen the parts affected.

He mentions many complaints, which, in his opinion, proceed from different motions and situations of the uterus, and proposes a good many medicines for the cure. As to his theory of conception, and his opinions about the birth in the seventh or eighth month of gestation, they were actually espoused by all medical writers till the last century.

In his first book of the diseases of women, he treats of difficult labours; observing, that if a woman is at her full time seized with labour-pains, and cannot after a long time be delivered, the child either lies across, or presents with the feet; for when the head presents, the case is favourable; whereas if the child lies across, a difficult labour ensues. This assertion he illustrates by the example of an olive in a narrow-mouthed jar, which cannot be so easily extracted by the middle, as when it presents with one end. He  
likewise

likewise says, that the birth will be difficult when the feet present ; in which case either mother or child, or both, for the most part, perish ; nor is the birth without difficulty when the fœtus is dead, apoplectic, or double. He then proceeds to direct us how to relieve the woman of several complaints to which she may be subject after delivery : he describes the method of excluding the fœtus, and of assisting in difficult labours ; if the child presents fair, and is not easily delivered, he orders sternutatories to be administered, and the patient to stop her mouth and nose, that they may operate the more effectually ; she must also be shaken in this manner : let her be fastened to the bed by a broad band crossing her breast, her legs being bended to the lower part of the bed, the other end of which must be elevated by two assistants, who gently shake her by intervals, until her pains expel the child ; the parts must be anointed with some unctuous medicine, and cautiously separated ; and care must be taken that the placenta immediately follows the child. If the fœtus lies across, presenting to the os uteri, whether it be alive or dead, he orders it to be pushed back and turned, so as that it may present with the head in the natural position ; and in order to effect this purpose, the woman must be laid supine on a bed, with her hips raised higher than her head. If the child is alive, and presents with the arm or leg, he advises us to return them as soon as possible, and bring down the head, or, if it lie across, presenting with the side or hip, the same methods must be used ; then the woman may be refreshed by sitting over the steams of hot water. The child is to be managed in the same manner when it is dead, and presents with leg or arm, or both ; but if the fœtus cannot be conveniently delivered on account of the body's being swollen, he directs us to bring it away piece-meal, in the following manner : if the head presents, let it be opened with a small knife ; and the bones of the skull being broken, must be extracted with a pair of forceps, for fear of hurting the woman ; or by an embryulus, firmly fixed on the clavicles, it may be extracted by little and little. After the head is delivered in this manner, should the child stick at the shoulders, he directs us to divide the arms at the articulations ; and they being brought away, the rest of the body generally follows with ease ; but if it will not yet give way, the whole breast must be divided, and great care taken that no part of the intestines be denuded or wounded, lest the guts, or their contents, falling out, should retard the operation ; then the ribs being broken, and the scapulæ extracted, the rest of the fœtus will easily follow, unless the abdomen is swollen ; in which case, the belly must be punctured, and on the exit of the flatus, the child will be brought along. If part of the child is already delivered, and the rest will not follow, nor can that which is out be returned, he orders the operator to take away as much as he can of it, and pushing up the remainder, turn the head downwards ; but, previous to this operation, he advises him to pare his nails, and to use a crooked knife, the point and back of which must be covered with the fore-finger at its introduction, lest it should hurt the uterus.

In his book *De Superfœtatione*, he directs us, when the child's head appears without the os uteri, and the rest of the body does not follow, the fœtus being dead, to wet our fingers with water, and introducing them between the os uteri and head, put one into the mouth, and laying hold of it bring it along. When the body is delivered, and the head remains behind (in those cases when the child comes by the feet) he advises the operator to dip both his hands in water, and introducing them between the os uteri and head of the child, grasp this last with the fingers, and extract it. If the head is in



in the vagina, it may be delivered in the same manner. When the child remains dead in the uterus, and cannot be delivered either by the force of nature or medicines, he directs us to introduce the hand, anointed with some unctuous cerate, and dividing the parts with an unguis fixed on the great finger, bring the fœtus along, as before.

In the first book of the Diseases of Women, he gives directions for excluding the secundines, provided they are not expelled in the natural way. He says, if the secundines come not away immediately after the birth, the woman labours under a pain in her belly and side, attended with rigours and a fever, which vanish when they are discharged; though for the most part the after-birth putrefies and comes away about the sixth or seventh day, and sometimes later. In this case, he orders the patient to hold her breath; and prescribes internally, mugwort, Cretan dittany, flowers of white violets, leaves of agnus castus, with garlic boiled or roasted, small onions, castor, spikenard, rue, and black wine.

In the book *De Superfetatione*, after having described the methods of delivering a dead child, he says, if the secundines come not away easily, the child must be left hanging to them, and the woman seated on a high stool, that the fœtus by its weight may pull them along; and lest this should be too suddenly effected, the child may be laid on wool newly plucked, or on two bladders filled with water, and covered with wool, which being pricked, as the water evacuates they will subside, and the child sinking gradually, will gently draw the secundines away; but should the navel-string happen to be broken, proper weights must be tied to it, in order to answer the same purpose; these being the easiest and least hurtful methods of extracting the placenta.

He afterwards observes, that if the woman has had a difficult labour, and could not be delivered without the help of machines, the child is generally weak, and therefore the navel-string ought not to be divided until it shall have either urined, sneezed, or cried aloud; in the mean time, it must be kept very near the mother: for though the child does not seem to breathe at first, nor to give any other signs of life, the navel-string, by remaining uncut, may be in a little time inflated, and the life of the infant saved.

With regard to the lochia or menses after delivery, he takes notice, that if they are altogether suppressed, or the discharge insufficient, and the uterus is indurated, the patient is afflicted with pains in the loins, groins, sides, thighs, and feet, together with an acute fever, accompanied with horrors. When the pains happen unattended with a fever, he orders bathing, and the head to be anointed with oil of dill; and a decoction of mallows, with oil of Cyprus, to be applied externally, in order to assuage the pain. He says, in all disorders where fomentations are necessary, the parts ought afterwards to be anointed with oil; but when there is a fever in the case, bathing must be avoided, warm fomentations used, the uterine medicines prescribed in draughts, and garlic, castor, or rue, boiled with oatmeal; he likewise observes, that if the uterus is inflamed after delivery, the patient is in imminent danger of her life unless a stool can be procured, or the symptom removed by bleeding. He likewise ascribes several complaints and disorders of women to the different positions and motions of the uterus; of which last, Plato, who lived immediately after Hippocrates, gives a very odd and romantic description in his *Timæus*. After affirming that there is implanted in the genitals of man an imperious, headstrong, inobedient power, that endeavours to subject every thing to its furious lusts, he says, the vulva and matrix of women is also an animal ravenous after generation, which  
being

being balked of its desire for any length of time, is so enraged at the disappointment and delay, that it wanders up and down through the body, obstructing the circulation, stopping the breath, producing suffocations, and all manner of diseases.

Although we have a piece in English called Aristotle's Midwifery, I find little or nothing of the practice in his works; he hath written on the generation of animals; and we find in him several hints curious enough, even upon our subject: he tells us, that women suffer more than other animals from uterine gestation and labour; that those women who take most exercise, endure both with the greatest ease and safety; and that the foetus in all animals naturally comes by the head, because there being more matter above than below the navel, the head necessarily tilts downwards. For this reason, he says, every birth in which the head presents is natural, and those unnatural in which the feet or any other part of the body come foremost.

We have nothing written on the subject of midwifery from his time to that of Celsus, who is supposed to have lived in the reign of the emperor Tiberius. This author hath given us a chapter on the delivery of dead children and the placenta, in which he hath copied from Hippocrates; though he is more full than his master, and mentions several improvements on his practice. After having given directions with regard to the woman's position, he advises the operator to introduce one finger after another, until the whole hand shall gain admittance; he says, that the largeness of the uterus, and the strength and courage of the patient, are great advantages to the birth; that the woman's abdomen and extremities must be kept as warm as possible; that we must not wait until an inflammation is produced, but assist her without delay; because, should her body be swelled, we can neither introduce our hands, nor deliver the child, without great difficulty; and vomitings, tremors, and convulsions, often ensue. When the crotchet is fixed upon the head, he directs us to pull with caution, lest the instrument should give way, and lacerate the mouth of the womb; by which means the woman would be thrown into convulsions and imminent danger of her life. When the feet present, he says, the child is easily delivered, by laying hold on them with the hands, and so bringing them along. If the foetus lie across, and cannot be brought down, he orders the crotchet to be fixed on the arm-pit, and drawn along by little and little; by these endeavours the neck will be almost doubled, and the head bent backwards; in which case this last must be separated from the body, and the whole extracted piece-meal. The operation, he says, must be performed with a crotchet, the internal surface of which is edged, and the head be brought away before the body; because, if the greatest part be extracted first, and the head left alone in the uterus, the case will be attended with great difficulty and danger. Nevertheless, should this misfortune happen, he directs a double cloth to be laid on the woman's belly, and a skilful assistant to stand at her left side, and with both hands on the abdomen to press from side to side, with a view of forcing the head against the os uteri; which being effected, it must be delivered by fixing the crotchet in the skull. With regard to the placenta, he directs us to deliver it in this manner: The child being delivered, must be given to a servant, who holds it on the palms of his hands, while the operator gently pulls the umbilical cord for fear of breaking it, and tracing it with his right-hand as far as the secundines, separates the placenta from the uterus with his fingers, and extracts it entire, together with the grumous blood; when the woman's thighs being placed close together, she must be kept in a moderately



moderately warm room, free from wind, and a cloth dipped in oxyrrhodon must be laid on her abdomen; the rest of the cure consisting in the application of those things which are used in inflammations and wounds of the tendons.

Moschion, who is supposed to have lived at Rome in the reign of Nero, says; that in difficult births the parts are first of all to be relaxed with oil; if the passage of the urine is obstructed by a stone in the neck of the bladder, he advises us to draw off the water with a catheter; if the fæces are indurated, he prescribes a clyster, and orders the membranes to be pierced with a lancet. He says the best position is that of the head presenting, the hands and feet being mingled and disposed along the sides. If the position is not right, and cannot be amended by putting the woman in proper postures, he advises us to introduce the hand when the os uteri is opened; and turn the child. If a foot presents (says he) push it back, and bring the fœtus by both feet, the arms being pressed down along the sides; if the knee or hip presents they must also be pushed back, and the child brought by the feet; if the back presents, introduce the hand, and alter the position by turning to the feet or to the head, if it be nearest; and if the head is large it must be opened, &c.

Rufus Ephesus; who lived in the reign of Trajan, gives a short account of the uterus and its appendages, and describes those tubes which are now called Fallopian, as opening into the cavity of the womb; though Galen arrogates this discovery to himself so particularly, as to say upon this subject, that he was surpris'd to find they had escap'd the notice of the common herd of anatomists; but more especially amazed that a man of Herophilus's accuracy should be ignorant of them; and Rufus has expressly mentioned the opinion of Herophilus on this particular.

Galen was born in the time of the emperor Adrian, anno Dom. 131; about six hundred years after Hippocrates; upon whose works he writes commentaries, and gives some reasonable aphorisms relating to women and children; we have two books of his writing, *De Semine* (the third being accounted spurious) one *De Uteri Dissectione*, *de Fœtuum Formatione*, *de Septimestri Partu*, lib. 14, and 15, *de Usu Partium*. He hath also written several books on anatomy and physiology, but nothing *de morbis mulierum*. In his physiology he is prolix and inaccurate; his anatomy is pretty exact in many things; but, upon the whole, he contains little or nothing to our purpose.

In Oribasius, who was a physician to Julian, we have a description of the parts, and in several places of his works, an account of the medicines used by the ancients in the diseases of women and children; he has also a chapter on the choice of a nurse, and another upon the milk, but says nothing of the operation.

Ætius, who (according to Le Clerc) lived in the end of the fourth, but in the opinion of Dr. Friend, in the end of the fifth century, was likewise a collector from the ancients; for neither he nor Oribasius can be filed original writers; the last indeed copied from none scarcely but Galen, and was therefore filed *Simia Galeni*; whereas the other compiled from all the authors that went before him, many of whom would have been lost in oblivion, had not they been mentioned in his works. He is very particular upon the diseases and management of women; his fourth *Sermo* of the fourth *Tetrad* being expressly written on this subject; and containing almost every thing which had been said before him.

In his first chapter, *De Uteri Situ, Magnitudine, ac Forma*, he distinctly divides the womb into a fundus and neck, and describes the *os tincæ* as ending in the *sinus muliebris*, five pudendum; which plainly appears to be no other than what we now call the vagina; for he says it is above six inches in length; but his description of the figure of the uterus is imperfect. His seventh chapter treats of conception; from Soranus. The tenth of the *pica*, taken from some of Galen's works that are lost. His description of this disease is to the following purpose:—Young women with child have vitiated appetites, and long for earth, ashes, coal, shells, &c. The distemper continues till the second or third month of gestation; but commonly abates in the fourth. To remedy the nausea and vomiting that attend it, he orders aloes, dried mint, and other stomachics.

In his twelfth and fifteenth chapters, he gives a detail of Aspasia's practice in the care and management of women during pregnancy, and in the time of labour; but the greatest part of these and the other chapters are taken from Hippocrates; to whom he has made a few insignificant additions, until we come to the twenty-second, in which there is a very full and distinct account of difficult births.

Among the causes that produce difficult labours, he enumerates weakness of mind or body, or both, a confined uterus, a narrow passage, natural smallness of the parts, obliquity of the neck of the uterus, a fleshy substance adhering to the cervix or mouth of the womb, inflammation, abscess or induration of the parts, rigidity of the membranes, premature discharge of the waters, which ought to be detained for moistening and lubricating the parts, a stone pressing against the neck of the bladder, and extraordinary fatness; an ankylosis of the ossa pubis at their juncture, by which they are hindered from separating in time of parturition; too great pressure of the uterus on the cavity of the loins, or too great quantity of feces and urine retained in the rectum and bladder; an enfeebled constitution, advanced age, slender make, and greenness of years, attended with weakness and inexperience.

He observes, that difficult labours likewise proceed from circumstances belonging to the child that is to be born; from the extraordinary size of the body or any part of it; from its being unable (through weakness) to facilitate the birth by its leaping and motion; from the crowding of two or three fœtuses; from twins presenting together at the mouth of the womb; from the death of the child, as it can give no assistance in promoting labour; from its tumefaction after death, and wrong presentation.

He says the natural position is when the head presents and comes forwards, the hands being extended along the thighs; and the preternatural; that in which the head is turned either to the right or left side of the uterus; when one or both hands present, and the legs within are separated from one another; that the danger is not great when the feet present, especially if the child comes forwards with the hands along the thighs; and that if while one leg presents, the other is kept up or bent in the vagina, this last must be brought down; nor is the difficulty great in those that lie across, a circumstance that may happen in three different ways; namely, when the child presents with either side, or with the belly; nevertheless he observes, that the case is easiest when the side presents, because there is more room for the operator to introduce his hand and turn the fœtus, so as that it may come either by the head or feet. The worst position, he says, is when the child presents double, especially if the hip-bones come foremost; this double presentation happens with the hips, the head and legs, and the belly; in which

last case he observes, that if the abdomen is opened, and the entrails taken out, the parts collapse, and the position is easily altered.

Over and above the fore-mentioned causes of difficult labour, he affirms it may be owing to an over-thickness or thinness of the membranes which break too late or too soon; as also to external causes, such as cold weather, by which the pores and passages of the body are constricted; or very hot weather, by which they are too much relaxed. All these circumstances, he says, ought to be minutely enquired into, and duly considered, by the physician who directs the midwife; nor ought this last to be permitted to tear or stretch the parts with violence. If the difficulty proceeds from the form of the pelvis, he directs the woman to be seated on a stool, her knees being bent and kept asunder; by which means the vulva will be dilated, and the cervix extended in a straight line; and those that are gross or fat are to be placed in the same manner. If the difficulty arises from straitness, stupor, or contractions, he says it will be proper to relax the parts, by seating the patient over warm steams and fumigations in a place conveniently warmed; by pouring into the vagina warmed oils, and by the application of emollient ointments and cataplasms; for this purpose he likewise recommends the warm bath, unless a fever or other complaint render it improper. Some, he observes, are carried about in a litter in a warm place; and others have been subjected to violent concussions; but those who, by a weak loose habit, are too much enfeebled to undergo labour, ought to be treated with prescriptions that consolidate, strengthen, and constrict; they ought to be sprinkled with perfumes and vinegar, anointed with cooling ointments of wine and oil of roses, and sit over infusions of roses, myrtle, pomegranates, and vine-twigs. If the difficulty is owing to the preternatural position of the fœtus, it must be as much as possible reduced into the natural way. If the foot or hand is protruded, the child must not be pulled by either; the limb must be returned, twisted, or lopped off, and the shoulder or hip moved with the fingers into a more convenient situation. When the whole body of the fœtus is strongly pressed down in a wrong position, he advises us to raise it to the uppermost part of the uterus, and turn it downwards again in a right posture; this operation must be performed gently and slowly, without violence; oil being frequently injected into the parts that no injury may be sustained by either mother or child. If the mouth of the womb continues close shut, it must be softened and relaxed with oily medicines; if there is a stone in the neck of the bladder, it must be pushed up with the catheter, and the urine (if in great quantity) drawn off. If the rectum is filled with feces, it must be evacuated by clysters; and proper methods are to be taken when delivery is prevented by inflammation, abscess, ulcer, soft or hard tumours, or any other such obstacles.

If the difficulty proceeds from a fleshy substance adhering to the neck of the womb, or from a thick membrane found in those women who are imperforated, the obstacle in both cases must be removed by the knife; and if the membranes that surround the child are too rigid to give way at the proper time, they must be cut without delay; if, on the contrary, the waters are discharged too soon, so as that the parts are left dry, the want of them must be supplied with lubricating injections made with the whites of eggs, decoctions of mallows, fenugreek, and the cream of barley ptisan.

If the difficulty proceeds from the smallness or strong contraction of the uterus, the parts are likewise to be rendered soft and distensible with lubricating ointments and fomentations; the mouth of the womb must be dilated with the fingers, and the child extracted by force; but should this method



fail, the foetus must be cut in pieces, and brought away by little and little. This, he says, is the only resource when the foetus is too large, and the most proper when it is dead; and its death may be certainly pronounced when the presenting part is felt cold and without motion. When two or three children present in the neck of the uterus, those that are highest must be raised to the fundus, until the lowest be first delivered.

If the difficulty is owing to the excessive largeness of the head, breast, or belly, he says, it will be absolutely necessary to open these cavities; and observes, that the most proper time for placing the woman in labour upon the stool, is when the membranes are felt presenting in a round extended bag.

His twenty-third chapter contains the method of extraction and exsection of the foetus from Philumenus, and is an accurate detail of the operations recommended above. He says, before the operator begins to deliver by exsection, he ought to consider the strength of the patient, and determine with himself whether or not there is a probability of saving her life; because if she is exhausted, enervated, lethargic, seized with convulsions, subsultus tendinum, with a disordered pulse, it is better to decline the operation than run the risk of her perishing under his hands; but if he thinks her strength and courage sufficient for the occasion, let her be laid in bed; on her back, her head being low, and her legs held asunder by strong experienced women; she may take by way of cordial, two or three mouthfuls of bread dipped in wine, in order to prevent her fainting; for which purpose, her face may be also sprinkled with wine during the operation. The surgeon having opened the pudenda with an instrument, and observed the source of the difficulty, whether tumour, callus, or any of the causes already mentioned, he must take hold of it with a forceps, and amputate with a bistory. If a membrane obstructs the mouth of the womb, it must be divided. If the delivery is prevented by the rigidity of the membranes that envelope the foetus, they must be pinched up with a pair of small forceps; and cut with a sharp knife, then the perforation may be dilated with the fingers, so as to effect a sufficient opening for the passage of the child.

If the passage is obstructed by the head of the foetus, it must be turned and delivered by the feet; but if the head is so impacted as that it cannot possibly be returned, a hook or crotchet must be fixed in the eye, mouth, or over the chin, and in this manner the child may be extracted with the operator's right hand; but besides this crotchet, which ought to be gently introduced, and guarded with the fingers of the left-hand, another must be insinuated in the same manner, and fixed on the opposite side, that the head may be extracted more equally, without sticking in one place; and one of the instruments hold in case the other should slip; and when these crotchets are properly applied, the operator must pull, not only in a straight line, but also from side to side.

He directs us to introduce our fingers besmeared with unctuous medicines, betwixt the mouth of the womb and the impacted body, in order to lubricate it all round. When the foetus is delivered as far as the middle, the extracting instrument must be fixed in the upper parts; if the head is either naturally too large or dropical, it must be opened with a sharp-pointed knife, that it may be evacuated, contracted and delivered; but if, notwithstanding this operation, it cannot be brought along, the skull must be squeezed together, the bones pulled out with the fingers, or bone-forceps, and the crotchet fixed for delivery. If after the head is extracted, there should be a contraction round the thorax, a perforation must be made near

the clavicles in the cavity of the breast, that the bulk may be diminished by the evacuation of the contained humours; if the child is dead, and the belly distended with air or water, the abdomen must also be opened, and, if need be, the intestines extracted.

If the arm presents, it must be separated at the joint of the shoulder; for this purpose a cloth must be wrapped round it, that it may not slip while it is pulled down to the shoulder; then, opening the labia, the joint will appear at which the limb may be taken off. This amputation being performed, the head must be pushed up, and the fœtus delivered. The same method must be pursued when both arms present, and when, though the feet are forced out, the rest of the body will not follow; in which case the legs must be separated at the groins.

If, when the fœtus presents double and cannot be raised up, the head is farthest down, the bones of the skull are to be squeezed together without opening the scalp or skin, and the crotchet being fixed in some part of it, will bring it forth, the body following in a straight line; but if the legs are nearest, they must be amputated at the coxa, and the hips pushed up, so as to allow the head to be squeezed and prepared for extraction. When the fœtus presents double, he says it is better to divide the head from the body than to push up the thorax and deliver by the feet; but should the rest of the body be delivered and the head left behind, the left-hand, anointed, must be introduced into the uterus, and the head being brought down with the fingers to the mouth of the womb, one or two crotchets must be fixed upon it, in order to bring it along; the most proper places in the head for the application of this instrument being the eyes, ears, mouth, or under the chin. For the extraction of the thorax, it may be fixed in the arm-pits, clavicles, præcordia, breast, and joints of the back and neck; for the lower parts, on the pubis, or in the pundenda of female children.

If the mouth of the womb be shut by an inflammation, he cautions us against using any violence, but orders it to be softened and relaxed by oily medicines, fumigations, baths, cataplasms; by these means the inflammation will be lessened or removed, and the os internum dilated so as to allow the fœtus to be delivered. If the body has been extracted piece-meal, he directs the parts to be laid together, in order to observe if the whole is delivered; and if any thing remains, it must be extracted without delay.

In his twenty-fourth chapter (the substance of which is also taken from Philumenus) he lays down the following directions for extracting the secundines:

The os internum (when the secundines are detained) is sometimes shut, sometimes open, and often inflamed; the placenta sometimes adhering to the fundus, and sometimes in a state of separation. If the os internum is open, and the secundines, separated from the uterus, lie rolled up like a ball, they are easily extracted by introducing the left-hand warmed and anointed; and after taking hold of them, drawing them gently down from side to side, and not straight forwards, for fear of a prolapsus vulvæ. If the os uteri is shut, it must be opened slowly with the finger, after it hath been lubricated with oil, or auxunge. If this method should fail, a pul-tice of barley-meal malaxed with oil, must be applied to the belly, the oily injections repeated, and if the patient's strength will permit, she must take sternutatories of castor and pepper, and potions of those medicines that bring down the menses, sitting at the same time over a fumigation.

All these things must be tried on the first and second days, and if they succeed so as to open the mouth of the womb, the secundines will be easily extracted.

extracted as above. But if all these methods fail, the woman must be no longer fatigued; they will in a few days putrify and come off in a dissolved sanies; and should the foetid smell affect the head and stomach, he prescribes such medicines as are used in obstructions of the menses.

His next chapter, which is taken from Aspasia, treats of the management of women after delivery, and he writes several more on the diseases incident to women, such as inflammations, impostumes, and cancers of the breast and uterus; compiled from Philumenus, Leonides, Archigenes, Philagrius, Soranus, Rufus, Aspasia, and Asclepiades.

The next considerable author on this subject is Paulus Aegineta, whom Le Clerc supposed to have lived in the latter end of the fourth century, though Dr. Friend brings him down to the seventh; he was the last of the old Greek medical writers.

His method of practice is much the same with that of Aëtius and Philumenus, as above described; and though not so full as they, he is very distinct and particular. He tells us in his preface, that he had collected from others, and although he was the first who had the name of *man-midwife* from the Arabians, the writings of Aëtius plainly shew that there had been many male-practitioners before him. In the seventy-sixth chapter of his third book, which treats of difficult births, he gives the appellation of *natural* to all those in which the head or feet present; and all other positions he deems *preternatural*.

In another place, he observes, that the woman ought to be seated on the stool or chair, when by the touch the mouth of the womb is felt open, and the membranes pushed down. As to his method of extracting a dead child and the placenta, it is much the same with that already described from Philumenus, in the preceding article.

Paulus is supposed to have studied at Alexandria; for long before his time, the Roman empire in the west had been over-run and ruined by the Goths and Vandals. Soon after this period, learning began to decline in the east; the schools of Alexandria were removed to Antioch and Haran by the Saracens, who subdued Egypt, and destroyed the Roman empire in Asia; and then the Greek physicians were translated into the Syriac and Arabic, at least the Arabians copied from them. This subject is fully discussed by Dr. Friend, in his History of Physic.

Serapion, one of the first Arabian writers, in his Tractatus Quintus, has several chapters on the diseases of pregnant women, with the method of cure.

The next author of any note belonging to this country was Rhazes; who in the latter end of the ninth century lived at Bagdat. Like other systematic writers in physic, he hath treated of the diseases of women; and written one book expressly on the diseases of children.

In the last chapter of his Liber Divisionum, he orders the membranes when they are too tough, to be pierced with the nail of the finger, or with a little knife; and if the waters are discharged a long time before delivery, so that the parts remain dry, he directs us to anoint them with oily cerates.

Avicenna lived at Ispahan about the year one thousand; and was so famous for his writings all over Asia and Europe, that no other doctrine was taught in the schools of physic till the restoration of learning. He is a voluminous author, treats largely of every part of midwifery, so far as it was known in his time; copying from those that went before him; the operation for the dead child he takes from Paulus; the extraction of the secundines from Philumenus; and the use of the fillet from his countryman Rhazes.



Rhazes. He is very full on all the diseases of women relating to the menses, uterine gestation, and delivery.

In all preternatural cases he says, the head ought to be reduced into the natural position: but should this be found impracticable, he advises us to deliver by the feet. He alledges that the head is the only natural way of presenting, and that all other positions are preternatural; though of these the easiest is when the fœtus presents with the feet.

He recommends all the old methods for assisting in natural labours; and if the woman cannot be delivered by these, he orders a fillet to be fixed over the head; if that cannot be done, to extract with the forceps; and should these fail, to open the skull; by which means the contents will be evacuated, the head diminished, and the fœtus easily delivered.

The next Arabian medical writer is Albucasis, who, in the eleventh or twelfth century, lived at Cyropolis, a city of Media, on the Caspian sea; and it appears from an Arabian manuscript in the Bodleian library, that this is the same person who was also known by the name of Alfaravivus.

He hath written on natural labours in the same way with his predecessors, advising us to assist the birth with fomentations and ointments, and by reducing the child into the natural position when any other part than the head presents. His operation for extracting the dead child is literally the same with that described by Ætius; but whether he copied it from that author, or from other Arabians his predecessors, is uncertain.

What is most particular in this author is, the description and figures of the instruments then used in midwifery; namely, a vertigo for opening the matrix, which seems to be much of the same contrivance with that which Rhazes calls the *torculum vulvens*. He likewise exhibits the figures of two other instruments for the same purpose; but not one of the three in the least resembles the speculum matricis, described in later writers: an impellers, to keep up the body of the child while the operator endeavours to reduce the head into the natural position: two kinds of forceps, the larger he calls *almisdach*, the other *misdach*; and two different kinds of crotchets. The *almisdach* is of a circular form, and seems contrived to deliver the head in laborious cases; the *misdach* is straight and full of teeth, according to the manuscript in the Bodleian library at Oxford; but in the Latin edition, both are circular and full of teeth.

After the twelfth century, physic began to decline in Asia. Theodore Gaza brought the Greek manuscripts from Constantinople, after that city was taken in the year 1453; and about this time the art of printing being found out, all the knowledge of the ancients was soon dispersed over Europe.

In the next century the practice of physic began to be encouraged in England. Linacre, born at Canterbury, and chosen fellow of All-souls in Oxford in the year 1484, was a man of learning, and projected the foundation of the college of physicians in London; for which he obtained a patent from king Henry VIII. and was himself president of it till the day of his death.

In the year 1565, one Dr. Raynalde published a book on midwifery, which he had translated into English from the original Latin. He informs the reader in his prologue (as he terms it) that the book, which was called *De Partu Hominis*, had been translated about two or three years before, at the request of some women, by a studious and diligent clerk; who having performed the task incorrectly, he (Dr. Raynalde) had been at great pains to revise and enlarge it in another translation; he also observes, that the

Latin edition had been formerly published in Dutch, French, Spanish, and other languages.\*

The author of this performance (contrary to the opinions of all other writers) says, when the child presents in the natural way with the head, that the face and fore-parts of the fœtus are towards the fore-parts of the mother; and that if any other part presents, the position is preternatural. He observes, that in France and Germany the woman is commonly placed in a sitting position, on a stool made in form of a compass; and advises us, in all preternatural cases, to turn the child to the natural position, even when the feet present; but if this should be impracticable, to bring it foot-ling, and in extracting to bind the feet together with a linen cloth. This, however, he pronounces a very jeopardous labour. He directs us to provoke and promote the delivery with fumigations and pessaries, and to prescribe internally, assa-fœtida, myrrh, castor, and storax; from which circumstances, he seems to have copied from the ancient writers:

Several authors of note lived and wrote in the sixteenth century, or betwixt the years 1530 and 1590, upon the diseases of pregnant women and the different methods of delivery. A collection of the most remarkable among these writers, who are called the old moderns, was published at Basil, 1586, in 4to. entitled, *Gynæciorum Commentaria*; and afterwards, in 1597, republished at Strasbourg in folio, by Israel Spacius, professor of medicine in that city, with the addition of two authors who had not been mentioned in the first. At the head of this collection is Felix Plateras, born at Basil; he published tables, explaining the use and structure of the parts of generation proper to women.

The next is the *Harmonian Gynæciorum* collected from Cleopatra, Moschion. Theodorus Priscianus, and another uncertain author, freed from repetitions and superfluities by Casparus Vulpnius.

Then follows Eros or Tortula, first published among the old Latin writers at Venice, by the sons of Aldus.

The fourth place is held by Nicolaus Rocheus, a Frenchman, whose works, published at Paris, are taken from the Greeks and Arabians; though he hath added some observations of his own. In his twenty-eight chapter he says, if the child is large, the os uteri must be dilated; if the hand or foot presents, neither must be laid hold on; but the operator introducing his hand to the buttock or shoulder, must reduce the fœtus into the natural situation, that is, so as to present with the head. His thirtieth chapter contains directions for extracting the placenta when it adheres. The os uteri must be dilated, and the accoucheur taking hold of the funis, must pull gently from side to side, lest the uterus should be brought down; then more strength must be exerted by degrees, until the secundines are brought away. His thirty-second chapter treats of monsters.

Ludovicus Bonaciolus, of Ferrara, is the fifth: his works were published at Strasbourg.

The sixth is Jacobus Silvius, of Amiens in Picardy.

Then comes Jacobus Rueff, who published at Zurich in Switzerland, and afterwards at Franckfort. He is the first who gives a draught of the *speculum matricis* for dilating the os internum, which he directs to be

\* This author was Eucharius Rhodion, whose book was in great esteem all over Germany; and in the year 1532 being translated into Latin, and other languages, from the original High Dutch, became universally the woman's-book over all Europe, and was introduced into England; where it was translated by this Dr. Raynalde, who nevertheless has taken great liberties with the author:



stretched in width; but by no means lengthwise, lest, the ligaments breaking, the womb should fall down. When the feet present, and the hands are stretched along the sides, he advises us to deliver footling; but if the hands are up over the head, he says the child ought not to be brought by the feet, unless the head be very small. If the knees present, he orders them to be pushed up, and the child to be delivered by the feet; but if the breech comes first, it must be reduced, and the fœtus brought by the head. The same practice he recommends in the presentation of the hands, shoulder, or hands and feet together.

He is succeeded by Hieron. Mercurialis, who lived at Padua, Venice, and Bologna, and practised much in the same manner.

The ninth is Johannes Baptista Montanus of Padua. Victor Trincavilius of Venice is the next. Albertus Bottonus of Padua is the eleventh.

After him comes Joannes le bon Heteropolitanus.

The author who holds the next place in this collection, is Ambrosius Paræus; the famous restorer and improver of midwifery. He lived at Paris; and his works were translated into Latin by Jacob. Gullimcau.

Next to him, Spachius places Albucasis the Arabian, already mentioned. Then, Franciscus Rouffetus, who wrote on the Cæsarian operation. His work was translated from French by Casparus Bauhinus; and several of his cases are published in the Memoirs of the Academy of Surgeons, by M. Simon.

There is also the figure of a petrified child, extracted from the womb after the death of the mother; a particular account of which, is added to Cordæus' comment upon Hippocrates.

Casparus Bauhinus, professor at Basil; is the sixteenth. Then Mauritius Cordæus, of Rheims and Paris.

The next is Martinus Akakia, of Paris; and the last is Ludovicus Mercatus, a Spaniard. This author says, if the child does not present with the head or feet, the case is dangerous, and preternatural; nor is the presentation of the feet without hazard and difficulty. In laborious cases, if the woman be young and vigorous, he prescribes bleeding in the foot, after Hippocrates; but is against the use of the bath.

If the fœtus comes double, or presents wrong, he directs us to push it up; and bring down the head, if possible; which ought also to be our aim when the hand or foot presents. He orders the fingers to be introduced, as Paulus directs (*digitis in unum conductis*) that is, the fingers and thumb formed into the shape of a cone. He exclaims against the Cæsarian operation as an unchristian undertaking; directs us, when the placenta adheres, to introduce the hand, and pull the funis gently from side to side; and recommends sneezing to the woman, as conducive to its expulsion.

When he treats of the manner of extracting a dead child, he says, with Ætius, we ought first to consider whether or not the woman has strength sufficient to bear the operation; then gives the method of Hippocrates, and in the next page describes the manner of Ætius.

Having thus given a short sketch of the authors collected by Spachius, I shall return to Paræus, who (as I have already hinted) was the first modern that made any considerable improvements in midwifery, which continued to his time without any material alteration, even after the other branches of physic had been improved. For example, if the child did not present in the natural way, they shook and altered the position of the woman, by which means they imagined the fœtus would turn to the right posture; or they attempted to move it so as that it should present with the head. If

this could not be effected, and the feet were near at hand; they brought it footing; but if they failed in this attempt, the child was supposed to be dead, and extracted with crotchets and hooks of various kinds; and if it could not be delivered in that manner, on account of its extraordinary size or the narrowness of the pelvis, they dismembered and separated the body with crooked and straight knives; and then extracted it piece-meal.

Paræus was the first who deviated from this practice; and expressly orders the child to be turned and brought away by the feet in all preternatural cases. He says, the most natural case is that in which the child presents with the head, and is delivered immediately on the discharge of the waters: it is more difficult when the fœtus comes by the feet, and still more so on the presentation of the arm and legs together; the back, belly, arm alone, or any other unnatural position. He directs us to bring away the secundines immediately after the child is delivered. He retains the old notions relating to the diseases and medicines; for the ancient theory was not altered till after the great Hervey found out the circulation of the blood.

Cotemporary with him, was the above-mentioned Jacobus Rueff, who practised at Frankfort, and in his writings recommends the method of the ancients; a circumstance from which we learn, that the improvements had not then reached Germany. Indeed they were very much retarded by the false modesty of the women, who were shy of male practitioners; and by the mistaken notions which were at that time entertained of the structure of the uterus; for all the descriptions till the time of Vesalius were very imperfect; and the womb in women supposed to be formed of different cells, resembling those of the bruté species.

Jacobus Guillemeau was the pupil of Ambrosius Paræus, adopted and confirmed his master's practice, and has written with learning and judgement.

About the end of the sixteenth century, or in Paræus's time, surgery in general was more cultivated and improved in Paris than any other part of the world; by means of the hospitals which had been from time to time erected; especially the Hôtel Dieu, into which poor women with child, destitute of the necessaries of life, were admitted.

By such opportunities, the surgeons improved their knowledge in midwifery; and by degrees established a better method of practice; the success that attended which, together with the progress of polite literature, that began to flourish about this time in France, got the better of those ridiculous prejudices which the fair sex had been used to entertain, and they had recourse to the assistance of men in all difficult cases of midwifery. This conduct was justified by experience; and the lives of many women and children were saved by the skill of the man-practitioner.

In the year 1668, Francis Mauriceau, after an extensive practice for several years in the Hôtel Dieu and city of Paris; published a treatise on midwifery, which exceeded every thing before made public on that subject. He describes the bones of the pelvis; and all the parts subservient to generation; the diseases incident to pregnant women; with the methods of prevention and cure; and, after having given a full and distinct account of all the different labours; and the way of delivering in each case, concludes his work with the diseases of women and children.

His method of practice was nearly the same with that of Paræus, and Guillemeau; but he is much fuller than either. In laborious cases, when the head presents, and cannot be delivered by the labour-pains, he orders a fillet or stripe of linen to be slit in the middle, and slipped over the head;

this contrivance hath since been improved with laces, by which it is contracted on the head. It is introduced by three different instruments, fixed with a great deal of trouble, and after all, of very little use.

He also invented a tire-tete, which cannot be applied until the skull is opened with a knife; consequently can be of no service in saving the child; and granting the fetus to be dead, other methods are much more effectual. He was ignorant of the forceps. When the head is left in the uterus, he advises us to extract it, by introducing over it a broad fillet like a sling.

He is so full on the diseases, that Boerhaave recommended him and Mercatus to his scholars on that subject. In his theory of conception, he hath not deviated from the opinions of Hippocrates; and in his second volume he hath published a great many judicious aphorisms, that are now translated into English by Mr. Jones; indeed, his writings were so universally approved, that they have been translated into several different languages.

Cotemporary with Mauriceau, were Dr. Chamberlain and his three sons, who practised midwifery in London with great reputation. One of these sons, father to the late Dr. Hugh Chamberlain, translated the first volume of Mauriceau into English; and in a note upon that author's method of extracting the child by the help of the crotchet and tire-tete, affirms, that his father, brothers, and himself, were in possession of a much better contrivance for that purpose.

This was no other than the forceps, which they kept as a nostrum, and was not generally known till the year 1733, when a description of the instrument was published by Chapman. Long before that period indeed, several kinds of forceps or extractors, different from those mentioned by the Arabians, were used in France, Germany, and other places; but all of them fell short of the instrument used by the Chamberlains, and said to be contrived by the uncle.

In the last century, although there were such excellent practitioners in London, and even before the translation of Mauriceau, Guillemeau's book on midwifery had been translated into English; and in it all the absurd notions about spells and amulets were left out: nevertheless one Nicholas Culpepper, who styles himself Gent. student in physic and astronomy, published at London a book intitled, A Directory for Midwives; in which he has copied the theory and practice of the old writers, many of whom he mentions, namely, Hippocrates, Galen, Ætius, &c. and frequently advises the reader to consult his translations of Sennertus, Riverius, Riolanus, Bartholin, Johnston, Veslingius, Rulandus, Sanctorius, Cole, the London Dispensatory, and a book which he himself had published under the title of The English Physician. His performances were for many years in great vogue with the midwives, and are still read by the lower sort, whose heads are weak enough to admit such ridiculous notions.

He was succeeded in that way of writing by one Dr. Salmon, who was also a great translator and compiler. He was partly author of a spurious piece called *Aristotle's Midwifery*, which hath undergone a great many editions, and contributed to keep up the belief of the marvellous effects of various medicines.

Mauriceau, in 1706, published a second volume, containing about eight hundred observations; but long before that period, he had gained such reputation by his writings as encouraged others of the same nation to write on the same subject. Accordingly we have the works of Portal, Peau, and Dionis; but all of them fall short of Mauriceau. About this time also Savard wrote several observations on the same art.



Henry Daventer practised at Dört in Holland; and in 1701 published a book on midwifery. He observed, that an imaginay freight line falling down from the naval would pass through the middle of the pelvis. This will nearly hold true when the abdomen is not distended; but in the last month of uterine gestation, in order to pass through the middle of the pelvis, such a line must be let fall from the middle space betwixt the naval and scrobiculous cordis. This, however, was a good hint and useful in practice.

He pretends to have made several useful discoveries, which seem feasible enough to those who have not had the opportunity of an extensive practice; such as the side or wrong positions of the os internum and fundus uteri, which (according to him) are chiefly the occasion of lingering, difficult, and dangerous labours. He seems to have been led into this mistake, by supposing that the placenta always adhered to the fundus uteri. As to the difficulties proceeding from the wrong position of the os internum, a practitioner would be apt to believe he had never waited for the effect of the labour-pains, which generally open it, by pushing down the waters or head of the child.

He was seldom called except in difficult cases, often proceeding from a distorted pelvis, which is common in Holland. When this is the case, the head of the child is commonly cast forwards over the pubis by the jetting in of the sacrum; or if one ilium is higher than the other, the os internum and fundus are thrown to different sides: but even then the chief difficulty is owing to the narrowness of the pelvis. The uterus is very seldom turned so oblique as he supposes it to be; or if it were, provided the child is not too large, nor the pelvis narrow, I never found those difficulties he seems to have met with: and should the labour prove tedious on account of a pendulous belly, by altering the woman's position, the obstacle is commonly removed.

For example: let her breech be raised higher than her shoulders; or she may be laid upon her side, in a preternatural case, when it is necessary to turn and deliver the child by the feet. Nevertheless, though he has run into extremes about the wrong positions of the uterus, in which he is the more excusable, as he had the fondness of a parent for a theory that he alleges was his own, yet there are some very useful hints in his book, particularly that about floodings, in which he directs us to break the membranes in order to restrain the hæmorrhage; and his method of dilating the os externum.

The next noted writer in this way is Lamotte, who lived at Valognes, near Caen in Normandy; and in 1715 published a book on midwifery, which seems to be the best of the kind since Mauriceau, and is translated into English by Mr. Tomkins. It contains about four hundred observations, the greatest part of which are illustrated with many judicious reflections.

In describing a case in which the head presented, he mentions the great fatigue it had cost him to turn and deliver by the feet; and hopes that some easier method will be found out for extracting the child in such circumstances: so that, although he wrote so lately, he must have been ignorant of the forceps. He, as well as Daventer, exclaims against the use of instruments; and in most laborious cases, when the head presented, turned and extracted the fœtus by the feet.

A number of such cases he has recounted; but I am afraid that, like other writers, he has concealed those that would have been more useful to

the young practitioner, and only given a detail of his own that were successful: for certain it is, the head of the child is often so large, or the pelvis so narrow, that labour-pains cannot possibly force it away; and frequently, when the fœtus hath been turned with great fatigue, and the body actually extracted, the force required to deliver the head with the hands alone is such as destroys the child; and sometimes it is absolutely impossible to bring it along without the help of instruments.

For my own part, when I first began to practise, I determined to follow the method of those gentlemen; but having by these means lost several children, and sometimes the mother, I began to alter my opinion, and consult my own reason: in consequence of which, in cases of such emergency, I opened the head, with a view of saving the woman if I could not preserve the life of the child. In the course of my deliberations on this subject, I likewise tried to improve upon the forceps, which seemed to me an instrument more mechanically adapted and easier applied than any other contrivance hitherto used: and surely experience justifies the use of this expedient, by which we are enabled to save many children which otherwise must have been destroyed.

Not that I would be thought to exult over those authors whom I have mentioned, as mostly enemies to all instruments whatever: in other things they have written very judiciously; and are blame-worthy in nothing so much as in having suppressed those unsuccessful cases which must have pened to men of their extensive practice.

I own indeed, when the woman has not strength nor pains sufficient to force along the child, and the difficulty does not proceed from a large head or narrow pelvis, the method of turning will prove successful; but, if in the other extreme, I appeal to all candid practitioners, whether many children are not lost, even when the head does not present, and when the body is first brought down, because the fœtus cannot be delivered in another manner.

The next writer in midwifery is M. Amand, of Paris, who describes the method of extracting the head, when left in the uterus, by means of a net. The contrivance is ingenious, but is not applied without great trouble, and cannot succeed when the pelvis is too narrow, or the head too large to pass.

Edmund Chapman practised midwifery several years in the country before he settled in London; where, 1733, he published a short account of the practice of midwifery, illustrated with about fifty cases; and is the first person who made public a description of the forceps used by the Chamberlains. Giffard's observations were published in the following year, by Dr. Hody, containing many useful remarks and histories of cases in which he had used the extractors or forceps.

Heister, professor at Helmstadt, a little town in the dukedom of Brunswick, in the year 1739, published at Amsterdam a treatise on surgery; in which we find a very concise and distinct account of the practice of midwifery, as well as of the Cæsarian operation.

Mr. Ould, surgeon in Dublin, in the year 1742, published a treatise on the practice of midwifery: in which there are two good observations; one relating to a case in which the head presents, and the other specifying what is to be done when delivery is retarded by the twisting of the funis round the neck of the child. He presers his *terebræ occulta* to the scissars, probably because he did not know the proper dimensions of this last instrument. The very next year, Mesnard published at Paris a book on the same subject, by way of question and answer; and is the first who contrived the curved in situ of the straight crotchets, which is a real improvement.

Over and above the writings of those I have mentioned; there are a great many curious and extraordinary observations on the practice of this art in Shenckius, Hildanus, Bonetus, the Philosophical Transactions, the Academies of Sciences and of Surgeons, and the Medical Essays of Edinburgh; and besides these, the best modern authors who have written on the diseases of women and children, are Sydenham, Harris, Boerhaave, Friend, Hamilton, Hoffman, and Shaw.

On the whole, that the young practitioner may not be misled by the useless theories and uncertain conjectures of both ancient and modern writers, it may be necessary to observe in general, that all the hypotheses hitherto espoused are liable to many material objections; and that almost every system hath been overthrown by that which followed it.

This will probably be always the case: and indeed, as theory is but of little service towards ascertaining the diagnostics and cure of diseases, or improving the practice of midwifery, such enquiries are the less material. What Hippocrates has written about the form of the uterus and its various motions, conception, the formation of the child, the seventh and eighth month's births, was believed as infallible till the last century, when his doctrine of conception and nutrition of the fœtus was overthrown; and many new and uncertain theories, on the same subject, introduced.

Some of the moderns conclude, that the ancients never turned and brought children by the feet, because Hippocrates directs us, in all cases, to bring the head into the natural situation; and says, that when delivery is performed by the feet, both mother and child are in imminent danger. Celsus, and all the writers till the time of Pataus, adopted this practice of bringing the head to present; but at the same time, many of them observe, that if this be not practicable, we must search for the feet, and deliver the fœtus in that manner. Celsus says, if the feet are at hand, the child is easily delivered footling: and Philumenus goes still farther, saying, that if even the head should present, and the child cannot be delivered in that position, we must turn and bring it by the feet.

With regard to the fillet and forceps, they have been alledged to be late inventions; yet we find Avicenna recommending the use of both. The forceps recommended by Avicen is plainly intended to save the fœtus; for he says, if it cannot be extracted by this instrument, the head must be opened and the same method used which he describes in his chapter on the delivery of dead children.

To conclude, we find among the ancients several valuable jewels, buried under the rubbish of ignorance and superstition; because the assistance of men was seldom solicited in cases of midwifery till the last extremity: and those disadvantages being considered, we ought to be surprized at finding so many excellent observations in the course of their practice; and be ashamed ourselves of for the little improvement we have made in so many centuries, notwithstanding our opportunities and the advantages we had from their experience.

True it is, we have established a better method of delivering in laborious and preternatural cases; by which many children are saved that must have been destroyed by their manner of practice; but are not many modern practitioners justly branded for their fordid and unsocial principles, in professing nostrums, both with regard to medicines and methods of delivery? Inasmuch, that I have heard a gentleman of eminence in one of the branches of medicine affirm, that he never knew one person of our profession who did



not pretend to be in possession of some secret or another ; from whence he concluded that we were altogether a body of empirics. Such reflections ought to make a suitable impression upon the minds of the honest and ingenuous, prompt them to lay aside all such pitiful selfish considerations, and for the future act with openness and candour ; which cannot fail of redounding to the honour of the profession and the good of society, as well as their own advantage.



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A  
T R E A T I S E  
OF  
M I D W I F E R Y.  
B O O K I.

C H A P. I.

*The structure and form of the pelvis, so far as it is necessary to be known in the practice of midwifery.*

S E C T. I.

OF THE BONES.

**T**HE pelvis is composed of three bones; the os sacrum, with its appendix, known by the name of coccyx, and the two ossa innominata. The sacrum in children is divided into five distinct bones and the coccyx into four cartilages; but, in adults, these last are formed into as many moveable bones, and the divisions of the sacrum ossified so as to become one bone.

Each os innominatum is, in infants, composed of three different bones, under the appellation of *os ilium*, *ischium*, and *pubis*; which are joined to one another at the acetabulum or cavity that receives the round head of the thigh-bone. This composition is in the point of figure, so irregular, that although in adults the three are ossified into one bone, those different names are still used, in order to distinguish one part of it from the other.

The ossa innominata of the opposite sides are joined to one another in the fore-part at the pubes, by a thick cartilage and strong ligaments; and the posterior part of each os ilium is connected with the upper and lateral part of the sacrum by the same apparatus.

Divers authors and practitioners in this art have alledged, that, towards the latter end of gestation, when all the parts of the abdomen are strongly pressed by the increased uterus, an extraordinary quantity of mucus is secreted, not only by the glands of the os internum and vagina, but also by those belonging to the cartilages and ligaments that connect the bones of the pelvis; by which means, the ligaments and cartilages are softened and relaxed, and the bones are separated from one another in time of labour. But, from experience and observation, I may venture to assert, that this separation is by no means an usual symptom, though sometimes it may hap-



pen; in which case the patient suffers great pain, and continues lame in those parts for a considerable time after delivery.

In some women, indeed, a kind of obscure motion may be perceived, when the child's head is forced into the pelvis by strong pains; the junctures of the sacrum with the ossa ilium, as well as that of the ossa pubis, seem to yield a very little alternately, in order to accommodate themselves to the shape of the head, as it is squeezed down and passes through the pelvis; but the bones are not separated to any considerable distance. See part ii. collect. i. No. 1.

The coccyx is moveable at its connection with the sacrum; as are also the four bones that compose it, in their articulations one with another; and this motion continues in adults, as well as in those of more tender years. In old age indeed, and even in young people who have suffered bruises upon the part, attended with great pain and inflammation, we frequently find the different pieces of this bone rigidly cemented together; but this anchylosis the more seldom happens, because they undergo a gentle motion at every excretion of the fæces, which helps to preserve their mobility. See part ii. collect. i. No. 2.

### S E C T. II.

THE brim or upper part of a well-shaped pelvis represents a kind of imperfect oval, or something that approaches a triangular figure. If we consider it as an oval, the long axis passes from side to side; but, as a triangle, the posterior part forms one side, and the ossa pubis constitute the opposite angle; so that, behind, it is composed of the broad part of the sacrum, where it joins with the last vertebra of the loins; on each side, by the inferior parts of the ilia; and before, by the upper parts of the ossa pubis.

The lower circumference of the pelvis is formed, behind, by the inferior part of the sacrum and its appendage; on each side, by the lower part of each ischium, and a broad ligament which rises from the spine of that bone, and, with the coccygæus muscle, is inserted into the edge of the coccyx and the lower part of the sacrum; and before, by the inferior parts of the ossa pubis, and the two processes that descend on each side to join with those that rise from the ischia; by which conjunction the foramen magnum ischii is formed on each side.

When the body of a woman is reclined backwards, or half-sitting half-lying, the brim of the pelvis is horizontal, and an imaginary straight line descending from the navel would pass through the middle of the cavity; but in the last month of pregnancy, such a line must take its rise from the middle space between the navel and scrobiculus cordis, in order to pass through the same point of the pelvis. See the anatomical figures, tab. i. ii. xii.

### S E C T. III.

IN the consideration of the pelvis, three circumstances are to be principally regarded and remembered; namely, the width, the depth, and form of the cavity on the inside.

1. The extent of the brim from the back to the fore-part, commonly amounts to four inches and one quarter; and from one side to the other, the distance is five inches and a quarter; so that this difference of an inch in the different axes ought to be carefully attended to in the practice of midwifery. See tab. i. But the width of the lower part of the pelvis is the reverse of this calculation, when the os coccygis is pressed backwards by the head of the child;

child; because, in that case, the distance between the coccyx and the lower part of the os pubis is near five inches; whereas the inferior and posterior parts of one os ischium are no more than four inches and a quarter from some parts of the other. Indeed, the width of the lower part of the pelvis is naturally the same in both diameters; so that this difference is occasioned by the yielding of the coccyx in the birth. Yet, though the motion of the os coccygis backward should make little odds to the width, the back part of the pelvis, when measured from the brim, being three times deeper than at the pubes on the fore part, answers the same purpose as if it were wider from the back to the fore part, than from side to side; because, by the time that the child's head is come down to the lower part of the pelvis, and the forehead turned back to the concavity formed by the os sacrum and coccygis, part of the os occipitis is come out below the pubes. See tab. ii. xiv. xvii.

2. The depth of the pelvis, from the upper part of the sacrum, where it is articulated with the last vertebra of the loins, to the lower end of the coccyx, is about five inches in a straight line; but when this appendix is stretched outward and backward, the distance will be more.

The depth from the sides to the brim toward its fore part, to the lower parts of the ischia, is four inches; and from the upper to the lower parts of the ossa pubis, where they join, the distance is no more than two inches; so that, in the dimensions of the pelvis, the side is twice and the back part three times the depth of the fore part.

3. Nor is the form and shape of the inside of the pelvis to be neglected by the practitioners of midwifery.

The sacrum and coccyx being convex on the outside, exhibit a concave figure on the inside; the curve being increased toward the lower end, so as that, from the extremity of the coccyx to the middle of the sacrum, the sweep nearly represents a semicircle; and from thence the bone slopes upward and forward.

From the upper part of the brim on each side (but nearer the fore than the back part) to the lower parts of the ischia, the descent is perpendicular; and the opening on each side, betwixt the lower parts of the sacrum and the posterior part of each ischium, is about three inches deep, and two and an half in width. The upper part of this vacuity on each side gives passage and lodgement to a muscle, vessels, nerves, &c. At its lower part, the coccygeus muscle and ligament above mentioned are stretched across from bone to bone; and this ligament is on the outside strengthened with another strong expansion, rising from the tuberosity of the ischium, and fixed into the edge of the sacrum and coccyx. All these parts yield and stretch, forming a concave equal to that of the sacrum, when the fore or hind head of the child is pushed down at the side and back part of the pelvis.

From the upper to the under parts of the ossa pubis, which form the anterior angle of the pelvis, the descent is almost perpendicular, or rather inclining a little backward; so that the inside of the basin is bent into a concave behind, and descends in almost a straight line before; while the ilia slope outward as they rise, and the vertebræ of the loins turn backward making an obtuse angle with the sacrum.

On the whole, it is of the utmost consequence to know that the brim of the pelvis is wider from side to side than from the back to the fore part; but that, at the under part of the basin, the dimensions are the reverse of this proportion; and that the back part, in point of depth, is to the fore part as three to one; and to the sides as three to two.



Though those dimensions obtain in a well-shaped pelvis, they sometimes vary in different women; and the reason of this remark will be more fully explained, when we treat of the method of delivery, in the different kinds of labours. See tab. i. ii.

#### S E C T. IV.

##### OF A DISTORTED PELVIS.

THE pelvis in decrepit women is not always distorted; because the distortion of the spine, in many women, does not happen till the age of eight, ten, twelve, or fourteen; when, being tall and slender, it is occasioned, by mismanagement in their dress, lying too much on one side, and other accidents; without having any effect upon the pelvis, the shape of which is by that time ascertained.

By most of those who have been rickety in their infancy, whether they continue little and deformed, or, recovering of that disease, grow up to be tall stately women, are commonly narrow and distorted in the pelvis, and consequently subject to tedious and difficult labours; for, as the pelvis is more or less distorted, the labour is more or less dangerous and difficult.

In rickety children, the bones are soft and flexible; and as they cannot run about and exercise themselves like those of a more hardy make, the pelvis, in sitting upon stools or the nurse's knees, is, by the weight of the head and body, often bent and distorted in the following manner:

The coccyx is pressed inward toward the middle of the cavity of the pelvis; the adjacent or lower part of the sacrum is forced outward; while the upper part of the same bone is turned forward with the last vertebra of the loins, approaching too near to the upper part of the pubes; so that the distance, in some women, from the back to the fore part of the brim, is not above three inches; in others, no more than two; and sometimes, though rarely, not above one inch and a half. See collect. i. No. 3. tab. iii. xxvii. xxviii.

In others, the lower vertebra of the loins with the upper end of the sacrum, jut inward and to one side; the ossa pubis, instead of being inwardly concave, are sometimes convex; and the lower part of each ischium so near to one another, that the distance, instead of four inches and one quarter, will not amount to more than three, and in some cases not so much. See collect. i. No. 4.

Sometimes the vertebræ that compose the sacrum ride one another, and form a large protuberance in that part which ought to be concave; but the most common circumstance of distortion is the jutting forward of the last vertebra of the loins with the upper end of the sacrum, forming a more acute angle with the spine; and in this part of the passage the head most commonly sticks. See collect. i. No. 5.

#### S E C T. V.

THE pelvis in women is wider than in men, the ilia spreading more outward, in order to sustain and allow free space for the stretching of the uterus, the sacrum is more concave; and the processes of the ossa pubis, at their junction with the ischia, are not so near to one another.

In order to demonstrate the advantage of knowing the wideness, depth, and figure of the inside of a well-formed pelvis, it will be necessary to ascertain the dimensions of the head of the child, and the manner of its passage in a natural birth.

The heads of those children that have passed easily through a large pelvis, as well as of those that have been brought by the feet, without having suffered any alteration in point of shape by the uncommon circumstances of the labour; I say, such heads are commonly about an inch narrower from ear to ear, than from the forehead to the under-part of the hind-head.

That part of the head which presents, is not the fontanel (as was formerly supposed) but the space between the fontanel and where the lambdoidal crosses the end of the sagittal suture, and the hair of the scalp diverges or goes off on all sides; for, in most laborious cases, when the head is squeezed along with great force, we find it pressed into a very long oblong form, the longest axis of which extends from the face to the vertex. From whence it appears, that the crown or vertex is the first part that is pressed down, because in the general pressure, the bones at that part of the skull make the least resistance, and the face is always turned upward (see tab. xxvii. xxviii.) Sometimes, indeed, this lengthening or protuberance is found at a little distance from the vertex backward or forward, or on either side; and sometimes (though very seldom) the fontanel, or forehead presents; in which case they protuberate, while the vertex is pressed and remains quite flat; but these two instances do not occur more than once in fifty or an hundred cases that are laborious.

Now, supposing the vertex is that part of the head which presents itself to the touch in the progress of its descent, the fontanel is commonly upward at one side of the pelvis, and is distinguished by the fontanel, where the coronal suture crosses the sagittal, the frontal bones at that part having more acute angles than the parietal; and when the hind-head comes down to the os ischium on the contrary side, one may feel the lambdoidal suture where it crosses the head of the sagittal, and, unless the scalp be very much swelled, distinguish the occiput at its junction with the parietal bones by the angle, which is more obtuse than those that are formed at that part of the skull; besides, in this position, the ear of the child may be easily perceived at the os pubis. As the head is forced farther along, the hind-head rises gradually into the open space below the ossa pubis, which is two inches higher than the ischium, while at the same time the forehead turns into the hollow of the sacrum.

This, therefore, is the manner of its progression; when the head first presents itself at the brim of the pelvis, the forehead is to one side, and the hind-head to the other, and sometimes it is placed diagonal in the cavity; thus the widest part of the head is turned to the widest part of the pelvis, and the narrow part of the head from ear to ear applied to the narrow part of the pelvis, between the pubes and the sacrum. (See tab. xiii. xvi.) The head being squeezed along the vertex, descends to the lower part of the ischium, where the pelvis becoming narrower at the sides, the wide part of the head can proceed no farther in the same line of direction; but the ischium being much lower than the ossa pubis, the hind-head is forced in below this last bone, where there is least resistance. The forehead then turns into the hollow at the lower end of the sacrum, and now again the narrow part of the head is turned to the narrow part of the pelvis. (See tab. xiv. xvii.) The os pubis being only two inches deep, the vertex and hind-head rise upward from below it; the forehead presses back the coccyx; and the head, rising upward by degrees, comes out with an half-round turn from below the share-bone; the wide part of the head being now betwixt the os pubis and the coccyx, which, being pushed backward, opens the widest space below,

and allows the forehead to rise up also with a half-round turn from the under-part of the os externum. See tab. xviii. xix.

From these particulars, any person will perceive the advantage of remembering that the pelvis at the brim is wider from side to side, than from the fore to the back-part, while below it is the reverse in point of dimension; that the pelvis is much shallower at the os pubis than at the sides and back-part; and that the sacrum and coccyx form a large concave in their descent, whereas that of the os pubis is perpendicular. Neither is it less necessary to consider the form of the head, as above described; for the knowledge of these things will convey a distinct idea of the manner in which the head is to be brought along in laborious cases; on what occasions the use of the forceps may be necessary; and when the method must be varied, as the form of the head or pelvis may chance to vary from our description.

Although the position of the head, in natural and laborious births, is commonly such as we have observed, it is not always the same, but sometimes differs according to the different figures of the pelvis and head, and the posture of the child *in utero*: for when the waters are in small quantity, or the membranes broke, so that the body of the child is close confined by the womb, if the fore-parts are toward the belly of the mother, that position may hinder the head from making the proper turns as it is pushed down, and the forehead may be forced toward the groin or pubes.— See Tab. xx. xxi. Sometimes, even in a well-formed pelvis, if the fontanel presents itself with the forehead to one side of the brim, and the hind-head to the other, when the head is forced down by the increasing pains, there will be less resistance at the vertex than at any other part; consequently the diameter from the fore to the hind-head will be lessened; and this last, by accommodating itself to the circumstances of the pressure, be first squeezed down, and at length come forward in the natural way; or, should the ear present itself, the vertex will be forced down in the same manner. But if the forehead be nearer than the vertex to the middle of the brim of the pelvis, every pain will force it farther down, and when delivered, it will rise in form of an obtuse cone, or sugar-loaf; and in that case the crown of the head will be altogether flat. But if, instead of the vertex or forehead, the fontanel should first appear, the space from the forehead to the crown will then rise in form of a sow's back; and in all these cases, the head is brought along with greater difficulty than in those where the vertex is first produced: and, in all laborious cases, the vertex comes down, and is lengthened in form of a sugar-loaf, nine-and-forty times in fifty instances. When the forehead presents, the face is sometimes pressed forward. See tab. xxii. If the pelvis be as wide from the back to the fore-part, as from side to side (though this seldom happens) the crown may be pushed down at the pubes, and the forehead afterwards squeezed into the hollow of the sacrum, without making the foregoing turns. If the belly of the child is to the forepart of the uterus, the vertex may be toward the sacrum, and the forehead to the pubes or groin: so that all these uncommon positions are attended with difficulty.



## C H A P. II.

*Of the external and internal Parts of Generation proper to Women.*

## S E C T. I.

## THE EXTERNAL PARTS AND VAGINA.

**T**HE mons veneris is situated at the upper part of the pubes, from which also begin the labia pudendi, stretching down as far as the lower edge, where the frænum labiorum or fourchette is formed.

The clitoris with its præputium is found between the labia, or middle and fore part of the pubes; and from the lower part of the clitoris, the nymphæ rising, spread outward and downward to the sides of the os externum, forming a kind of fulcus or furrow, called the *fossa magna* or *navicularis*, for the direction of the penis in coition, or the finger in touching, into the vagina. See collect. ii. No. 1, 2.

The meatus urinaris is immediately below the under edge of the symphysis of the ossa pubis, and at the upper part of the os externum, which is the orifice of the vagina, situated immediately below the said bones of the pubes; the lower edge of which bones is equal to the lower edge of the fræum or fourchette, which bounds the inferior part of the fossa magna and os externum, restraining it as if with a bridle.

The perinæum extends from this border to the anus, being about one inch or one and a half in length; the wrinkled part of the anus is about three-quarters of an inch in diameter; from thence to the coccyx the distance is about two inches; so that the whole extent from the fourchette to this bone amounts to about four inches, or four and a quarter.

What remains of the lower part of the pelvis is covered and filled up with the integuments, adipose membrane, and the muscles levatores ani; while within these are contained the muscles belonging to the clitoris, mouth of the bladder, os externum, and anus.

In young children, there is a thin membrane called the *hymen*, extended over the lower part of the os externum, representing the figure of a crescent, the concave and open side being turned toward the meatus urinaris. In some, the middle of this concave is attached to the lower part of the meatus, forming two small openings; nay, in some adults this membrane has entirely shut up the entrance of the vagina, so that they have been altogether imperforated; but when broke, it recedes, and forms the *carunculæ myrtiformes*. See collect. ii. No. 3, 4, 5.

On each side of the meatus urinaris are two small lacunæ or openings, the tubes of which, ending in a kind of sacculus, come from the prostate gland; from these a thin fluid is ejected in time of copulation, and that from some women with considerable force; and sometimes, though seldom, to the quantity of several drachms.

The urethra in women is about one inch and an half in length. The vagina is formed of a strong thick membrane, of a spongy texture, more contracted in virgins than in married women. When stretched to its full extent, it may be about five, six, or seven inches long, and two in width, according to the difference of stature in different women; but, when the uterus hangs down in the vagina, the length will not be more than two or three

three inches ; and it may be stretched with the finger to the width of three or four. The inside of it, in young women, is full of rugæ, folds or wrinkles, which are partly obliterated in those who have boren children.

The upper end of the vagina is joined to the circumference of the lips of the os uteri, which resemble the mouth of a puppy, or tench ; and a thin expansion of this membrane, being reflected inward, covers the exterior part of these lips, which in virgins are smooth and of an oval form. It is also continued along the inside of the uterus, constituting the internal membrane, of the neck and fundus, which is likewise full of plicæ, especially in young subjects. See tab. v. vi.

As to the different names of those parts, the book of Schurigius, published at Dresden in the year 1729, may be consulted. The entry of the vagina is commonly called the *sphincter vaginae*, and the mouth of the womb is often distinguished by the appellation of *os tincae* ; but, as the mention of these parts will frequently occur in the course of this treatise, I shall, in order to avoid confusion or mistake, call the first *os externum*, the other *os internum*, through the whole book.

## S E C T. II.

### O F T H E U T E R U S.

THE uterus is about three inches long from the os internum to the upper part of the fundus, and one inch in thickness from the fore to the back part. It is divided into the neck and fundus, the length of the neck being an inch and three quarters, while that of the fundus is one inch and one quarter. The width of the uterus at the neck is about one inch, but at the fundus twice as much. The uterus is smaller in young women.

The outside shape of the uterus in some measure resembles a flattened cucurbit, or that kind of spear which hath a long neck.

The canal or entrance from the os internum to the cavity of the fundus uteri, will admit a common director ; being a little wider in the middle and more contracted at the upper end.

The cavity of the fundus, is in point of figure something between an oval and triangle ; one of the angles commencing at the upper end of the foresaid canal, and the other two expanding the sides of the fundus, from which arise the fallopian tubes. These tubes are about three inches long, and so narrow at their entrance from the uterus, as scarcely to admit a hog's bristle ; but the cavity of each turns gradually wider, and ends in an open mouth or sphincter, from the brim of which is expanded the simbria or morfus diaboli, that generally bears the likeness of jagged leaves, and in some, resembles an hand with membranous fingers, which is supposed to grasp the ovum when ripe and ready to drop from the ovarium.

The uterus is formed first of the inside membrane that rises from the vagina, and lines all the interior part of the womb. Immediately above this coat is the thick substance of the uterus, composed of a plexus of arteries, lymphatics, veins, and nerves ; and the vessels on its surface, when injected, seem to run in contorted lines. It appears to be of the same glandular texture (though not so compact) as that of the breasts, without any muscular fibres, except such as compose the coats of the vessels ; neither is there any necessity for that muscle which Ruysch pretended to discover at the fundus, for the convenience of forcing off the placenta ; because this cake as frequently adheres to other parts of the womb as to the fundus.

The substance of the uterus appears more compact and pale than that of muscles; or if it be muscular, at least the fibres are more close, and more intricately disposed, than in other muscular parts. The blood-vessels of the womb, in the virgin or unimpregnated state, are very small, except just at their approach to its sides, at the roots of the ligamenta lata. But as soon almost as they enter its substance, they are dispersed into such numbers of smaller branches through the whole, that, when it is cut, we can observe but few, and those very small, orifices, much less any cavities that deserve the name of sinuses. Indeed, when this part is minutely injected, it seems to be almost nothing but a mass of vessels; a circumstance common to it with other parts of the body; and anatomists are agreed, that the greater number of vessels visible in such nice injections, are those through which the serum or lymph of the blood circulates in the living body; whence the error loci in an ophthalmia is imitated by subtil injections of coloured matter into the arteries of the dead subject. See tab. v.

When the uterus stretches in time of gestation, the vessels are proportionally dilated by an increase of the fluid they contain; so that, at the time of delivery, some of them are capacious enough to admit the end of the little finger. Yet the substance of the womb, for the most part, instead of growing thinner, as Mauriceau alledges, or thicker, according to Davenport, continues of its natural thickness during the whole term of pregnancy; and this equality is maintained by the gradual distension of the vessels that enter into its composition. In time of labour, indeed, as the waters are discharged, the uterus contracts itself and grows thicker; and the resistance ceasing at the delivery of the child and after-birth, it becomes smaller and smaller, until it has nearly resumed its natural dimensions. See collect. iii. No. 1, 2. tab. ix. xli.

For, as the uterus contracts itself after parturition, the arterial blood cannot flow into it in the same quantity as that with which the vessels are filled in their state of distension. The fluids are gradually emptied into the vena cava ascendens, but chiefly through the mouths of the vessels that open into the cavity of the womb, and the vessels themselves that were stretched, elongated, and seemed to recede from one another, are also contracted by degrees, and that in such a direction as to reduce the uterus into the same shape and size which it bore before impregnation; nay, the fibres are again so compacted, that they, and even the vessels, are scarce discernible.

The vagina on its outside is covered with a thick adipose membrane; by means of which it is on the fore part attached to the lower part of the bladder, and on the back part to the lower end of the rectum and anus; and by the same means all these parts are connected with the peritonæum, or internal surface of the pelvis.

The uterus is contained in a duplicature of the peritonæum, which covers it every where above, and is connected with its substance by a very thin cellular membrane; as for the peritonæum in itself, it is a smooth membranous expansion, that covers all the inside of the abdomen, and gives external coats to all the viscera contained in that cavity. On the fore part it lines the muscles of the abdomen and diaphragma; backward, it covers the abdominal viscera in general, the aorta and vena cava descendens, the kidneys, ureters, and spermatic vessels, the external and internal iliacs, the psoas and muscles that cover the inside of the ilium, whence it rises double, and forms the ligamenta lata, in which are contained the ovaria and



and fallopian tubes. This duplicature, where it meets in the middle, envelops all the uterus, as before observed, and gives a covering to the round ligaments that rise from each side of the fundus uteri, and are inserted or lost about the upper and external part of the pubes and groin. The peritonæum is also reflected from the fore part of the uterus over the upper part of the bladder; and upon the back part of the uterus it descends even upon the vagina, from which it is again reflected upward over the rectum. By these attachinents, especially the broad and round ligaments, the uterus is kept between the vesica urinaria and rectum, loosely suspended in the vagina, within two or three inches of the os externum; the epiploon and intestines occupy the upper and fore part of the pelvis, by which means the uterus is pressed downward and backward to the lower and concave part of the sacrum. See tab. v. fig. 2. As the vesica urinaria fills and stretches with urine, the viscera are raised; but as the bladder is emptied, they return; and this is the reason that the os uteri is commonly felt backward toward the os coccygis. Sometimes it is found tilted to one side, at other times forward toward the pubes, and the fundus pressed low down on the back part. The os uteri is also higher or lower according as the ligaments are more or less lax or tense. In coition, the uterus yields three or four inches to the pressure of the penis, having a free motion upward and downward, so that the reciprocal oscillation, which is permitted by this contrivance, increases the mutual titillation and pleasure. See tab. v.

The ligaments undergo no extraordinary extension in time of uterine gestation, because they sink down two inches with the uterus in an unimpregnated state; and when the fundus rises, they will be raised, at the same time, to the height of not only these two inches, but as much more, without being stretched in the least. Besides, as the uterus rises still upward, the sides of it approach the ilia, from whence the broad ligaments take their origin; and this circumstance is equal to an acquisition of three inches more; so that upon the whole, these ligaments seem to be very little stretched, even in the last month of pregnancy.

### S E C T. III.

#### OF THE OVARIA, VESSELS, LIGAMENTS, AND FALLOPIAN TUBES.

THE ovaria are two small oval bodies, one of which is placed behind each fallopian tube, supposed to be little more than a cluster of ova, whence they derive their present name; for, by ancient authors, they are mentioned by the appellation of the female testicles. Each ovarium is about one inch in length, half as broad, and one quarter of an inch in thickness; more convex on the fore than on the back part, of a smooth surface, covered with the peritonæum. See tab. v.

The blood-vessels are, first, the spermatic arteries and veins, which have nearly the same origin as those in men, are mostly distributed upon the ovaria and tubes, and at the upper part of the uterus, communicate with the hypogastrics; from the branches of which, the body of the womb is furnished. All these arteries anastomose, and are supposed to detach small ramifications that open into the cavity of the uterus. The veins are large, communicate one with another, with the hæmorrhoidals and vena portarum, and have no valves.

The ligamenta rotunda are two vascular ropes, composed of veins and arteries inclosed in the duplicature of the ligamenta lata, seemingly arising more

from the crural artery and vein, from whence they are extended to the sides of the fundus uteri.

The nerves come from the intercostals; lumbares; and sacri, as described in Boerhaave's Institutes, and Winflow's Anatomy:

### C H A P. III.

#### *Of the Catamenia, and Fluor Albus, in an unimpregnated State.*

##### S E C T. I.

**T**HE uterus, according to some, and all the parts subservient to generation, arrive at full growth about the age of fifteen. The vessels are then sufficiently dilated, and those that end in the cavity of the womb, so distended with blood, that their mouths are forced open, they empty themselves gradually, and for that time the plethora in the uterus, and neighbouring parts, is removed.

Several ingenious theories have been erected, to account for the flux of the menses, particularly by Doctors Friend, Simpson, and Astruc: the two last of whom, with many others, alledge, that there are sinuses in the uterus, furnished with side-vessels opening into its cavity; which sinuses are gradually stretched by the blood they receive from the arteries, until the fourth or beginning of the fifth week, when the lateral vessels are forced open, and the accumulated blood evacuated into the cavity of the womb. But if this was the case, the same mechanism must prevail in other parts of the body, through which the like periodical discharge is made, when the uterus is obstructed; as from the nose, hairy-scalp, lungs, stomach, mesenteric and hæmorrhoidal vessels, and even through the skin of the legs, and other parts of the body. Besides, such an accumulation in large sinuses, though the blood were not entirely stagnated, would produce a viscosity like that which obtains in the rheumatism and other inflammatory distempers.

Those who live in hot climates, are frequently visited with the menses at the age of twelve; and women who are kept warm, and live delicately, undergo this discharge earlier than those who use a different regimen: and if the catamenia do not flow at the stated time, the patient is soon after seized with the chlorosis, unless some other evacuation happens in lieu of the menses.

They commonly cease to flow about the age of forty-five, except in those with whom they began at twelve, or in such as have borne a great many children; in which case, they cease about the age of two-and-forty, or sooner.

In young people, the momentum of the circulating fluid is greater than the resisting force of the solids; so that the vessels continue to be gradually stretched, until, by their number, capacity, and length, this momentum is dissipated, so as to become no more than equal to the resistance. About this time the superplus of blood begins to be discharged, and thus the equilibrium is preserved till the age of forty-five, when the fibres growing rigid, the incrementum is lessened, the evacuation is no longer necessary, nor has the blood force enough to make good its wonted passage into the cavity

cavity of the womb. In the same manner are produced the symptoms of old age.

The catamenia are, therefore, no more than a periodical discharge of that superplus of blood which is collected through the month, and, towards the crisis, attended with pains in the loins, breast, and head, more or less acute, according to the circumstances of the plethora; all which complaints gradually vanish when the menses begin to appear.

This evacuation commonly continues till the fifth or sixth day, in some to the third only, and in others to the seventh: the quantity discharged being, according to Hippocrates, two *heminae*; equal, by the computation of some, to eighteen or twenty, and in the opinion of others, to twenty-four ounces: but this must certainly be a mistake, for they rarely exceed four ounces, except when they flow in too great quantity.

Women that are delicately kept, and plentifully fed, have this discharge more frequently, and in greater quantity, than those who are inured to much exercise, or subject to copious perspiration: yet both these constitutions may be healthy, and ought not to be tampered with by prescriptions for altering the period or quantity of this evacuation. Indeed, if the flux be so frequent or immoderate as to exhaust the strength of the patient, it will be necessary to prescribe bleeding before the return of the period; rest, cooling and astringent medicines, not only taken internally, but likewise applied externally, and injected into the vagina. See collect. iv. No. 1, 2.

On the contrary, if they flow too seldom, in too small quantity, or do not appear at all, so that a dangerous plenitude ensues, the plethora must be lessened by plentiful bleeding, and repeated purges, and the discharge solicited by warm baths, fumigation, and exercise. But if the patient has been long obstructed from a lentor, viscosity, and retarded motion of the fluids in the uterus and neighbouring parts, the fullness must be taken off by the above-mentioned evacuations, unless the constitution be already weakened; then every thing that will gradually attenuate the fluids, and quicken their circulating force, ought to be administered; such as chalybeate and mercurial medicines, together with warm bitter and stomachic ingredients, assisted with proper diet and exercise, according to the prescriptions to be found in Hoffman, Friend's Emmenologia, and Shaw's Practice of Physic. See collect. iv. No. 3. 4.

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#### OF THE FLUOR ALBUS.

THE inside membrane of the uterus, according to Astruc, is thick-set with small glands, which he calls the *colatura lactea*. These, in an unimpregnated uterus, separate a mucus that lubricates the cavity and canal of the neck, by which means the sides are prevented from coalescing, or growing together. The fluor albus is no other than this mucus discharged in too great quantity from the uterus, as well as from the vagina; and this excess, when it happens from plenitude, in those who feed plentifully without taking sufficient exercise, is often remedied by general evacuation, such as venæsection, emetics, cathartics, and a more abstemious diet, with a greater share of exercise than usual. But the cure is more difficult when the complaint is of long standing, and proceeds from a bad habit, the constitution being weakened by the inordinate discharge. In this case, it will be necessary to use repeated emetics, gentle exercise, and all those medicines that contribute to strengthen a lax habit of body; or, if the disorder be cancerous, it must be palliated with anodynes. As to the form



of prescription in all these cases, Hoffman may be consulted. See collect. iv. No. 5, 6.

## S E C T. II. O F C O N C E P T I O N.

THE minutæ, or first principles of bodies, being without the sphere of human comprehension, all that we know is by the observation of their effects; so that the modus of conception is altogether uncertain, especially in the human species, because opportunities of opening pregnant women, so seldom occur.

Although the knowledge of this operation is not absolutely necessary for the practice of midwifery, an investigation of it may not only gratify the curious, but also promote farther enquiries; in the course of which, many material discoveries may be made, in the same manner as many valuable compositions in chymistry were found out in the last century, by those who exercised themselves in search of the philosophers' stone.

From the time of Hippocrates, to the sixteenth century, it was generally believed that the embryo and secundines were formed by the mixture of the male and female semen in the uterus; but during the last hundred years, anatomy received great improvements by the frequent dissection of human bodies; and in some female subjects, the fœtus was found in one of the fallopian tubes; in others, it was discovered in the abdomen, with the placenta adhering to the surface of the viscera. See collect. v.

Malpighius and others, between the years 1650 and 1690, wrote expressly upon the incubation of eggs, their formation, and the gradual increase of oviparous animals. The great Harvey observed the progress of the viviparous kind, in a great number of different animals which he had opportunities of opening. De Graaf dissected near one hundred rabbits, and is very particular and accurate in the observations he had made. Ruysch, Aldes, Needham, Steno, Kerkringius, Swammerdam, Bartholine the son, and Drelincourt, employed themselves in the same enquiries; and in consequence of their different remarks, a variety of theories have been erected; yet all of them have been subject to many objections; and even the following, though the most probable, is still very uncertain:

When the parts in women, subservient to generation, attain their full growth, one or more of the ova being brought to maturity, that part of the peritonæum which covers the ovarium begins to stretch; the nervous fibres are accordingly affected, and contract themselves so as to bring the fimbria of the fallopian tube in close contact with the ripe ovum; by which mechanism, this last is squeezed out of its nidus or husk into the cavity of the tube, through which it is conveyed into the uterus by a vermicular or peristaltic motion; and if it is not immediately impregnated with an animalcule of the male semen, must be dissolved and lost, because it is now detached from the vessels of the ovarium, and has no vis vitæ in itself.

The external coat of the ovum is the membrane chorion; one-fourth part of which is the placenta, supposed to be the root by which it was formerly joined to the vessels of the ovarium, and the navel-string is no other than a continuation of the vessels belonging to this cake.

The chorion is on the inside lined with another membrane called *amnion*; and both are kept distended in a globular form by a clear serous fluid, or thin lymph.

As for the male semen, according to the observation of the celebrated Leeuwenhoek, it abounds with animalcula, that swim about in it like, so



many tadpoles; and these are larger and more vigorous the longer the semen hath remained in the *visculæ feminales*.

The parts of both male and female being thus brought to maturity, the following circumstances are supposed to happen in coition, especially in those embraces which immediately follow the evacuation of the menses:

In the woman, the friction of the penis in the contracted vagina, the repeated pressure and shocks against the external parts, the alternate motion upward and downward of the uterus, with its appendages the ovaria, fallopian tubes, and round ligaments, produce a general titillation and turgency; in consequence of which, the nervous fibrils are convulsed, and a fluid ejected from the prostate or analogous glands, as well as from those of the uterus and fallopian tubes. The fimbria belonging to one of which, now firmly grasps the ripened ovum, which at the same instant is impregnated with the male seed that in the orgasm of coition had been thrown into the uterus, and thence conveyed into the cavity of the tube by some absorbing or convulsive power. When the two matured principles are thus mingled, one of the animalcula insinuates itself into the ovum, and is joined with its belly to that ruptured part of it from which the navel-string is produced; or, entering one of the vessels, is protruded to the end of the funis, by which a circulation is carried on from the embryo to the placenta and membranes. The ovum being impregnated is squeezed from its nidus or husk into the tube, by the contraction of the fimbria; and thus disengaged from its attachments to the ovarium, is endowed with a circulating force by the animalculum, which has a *vis vitæ* in itself; the vessels on the surface of the ovum being opened in consequence of its detachments from the ovarium, absorb the surrounding fluid which is secreted by the glands in the cavity of the tube and uterus, or forced into them by motion, heat, and rarefaction, and carried along the umbilical vein for the nourishment and increase of the impregnated mass.

Of the semen that is injected or absorbed into the uterus, part is mixed with the fluid secreted by the glands in the canal of the neck, which is blocked up with a sort of gluten formed by this mixture; so that the ovum is thereby prevented from sinking too far down, and being discharged.

This theory of conception, though very ingenious, and of all others the best supported with corroborating considerations, such as, that fœtuses and embryos have been actually found in the cavity of the tube and abdomen, without any marks of exclusion from the uterus; besides other presumptions that will be mentioned when we come to treat of the nutrition of the fœtus; I say, notwithstanding the plausibility of the scheme, it is attended with circumstances which are hitherto inexplicable; namely, the manner in which the animalculum gains admission into the ovum, either while it remains in the ovarium, sojourns in the tube, or is deposited in the fundus uteri; and the method by which the vessels of the navel-string are inoculated with those of the animalculum. Indeed, these points are so intricate, that every different theorist has started different opinions concerning them, some of which are rather jocular than instructive.

## S E C T. III.

## OF THE INCREASE OF THE UTERUS AFTER CONCEPTION.

**I**T is supposed that the ovum swims in a fluid, which it absorbs so as to increase gradually in magnitude till it comes in contact with all the inner surface of the fundus; and this being distended in proportion to the augmentation of its contents, the upper part of the neck begins also to be stretched.

About the third month of gestation, the ovum in bigness equals a goose-egg; and then nearly one-fourth of the neck at its upper part is distended equal with the fundus. At the fifth month, the fundus is increased to a much greater magnitude, and rises upward to the middle space betwixt the upper part of the pubes and the navel; and at that period one-half of the neck is extended. At the seventh month, the fundus reaches as high as the navel; at the eighth month, it is advanced midway between the navel and scrobiculus cordis; and in the ninth month, is raised quite up to this last-mentioned part, the neck of the womb being then altogether distended. See tab. v, vi, vii, viii.

Now that the whole substance of the uterus is stretched, the neck and os internum, which were at first the strongest, become the weakest part of the womb, and the stretching force being still continued by the increase of the fœtus and secundines, which are extended by the inclosed waters in a globular form, the os uteri begins gradually to give way. In the beginning of its dilatation, the nervous fibres in this place being more sensible than any other part of the uterus, are irritated, and yield an uneasy sensation; to alleviate which, the woman squeezes her uterus by contracting the abdominal muscles, and at the same time filling the lungs with air, by which the diaphragm is kept down; the pain being rather increased than abated by this straining, is communicated to all the neighbouring parts to which the ligaments and vessels are attached, such as the back, loins, and inside of the thighs; and by this compression of the uterus, the waters and membranes are squeezed against the os uteri, which is of consequence a little more opened. See tab. ix, x, xi, xii.

The woman being unable to continue this effort for any length of time, from the violence of the pain it occasions, and the strength of the muscles being thereby a little exhausted and impaired, the contracting force abates; the tension of the ostinæ being taken off, it becomes more soft, and contracts a little; so that the nervous fibres are relaxed. This remission of pain the patient enjoys for some time, until the same increasing force renews the stretching pains, irritation, and something like a tenesmus at the os uteri; the compression of the womb again takes place, and the internal mouth is a little more dilated, either by the pressure of the waters and membranes, or, when the fluid is in small quantity, by the child's head forced down by the contraction of the uterus, which in that case is in contact with the body of the fœtus. See tab. xii. xiii. xiv.

In this manner the labour-pains begin, and continue to return periodically, growing stronger and more frequent until the os uteri is fully dilated, and the membranes are depressed and broke; so that the waters are discharged, the uterus contracts, and, with the assistance of the muscles, the child is forced along and delivered.

Although this account may be liable to objections, especially in those cases when the child is delivered before the full time, it nevertheless seems more probable than that hypothesis which imputes the labour-pains to the  
motion

motion of the child calcitrating the uterus ; for it frequently happens that the woman never feels the child stir during the whole time of labour ; and dead children are delivered as easily as those that come alive, except when the birth is retarded by the body's being swelled to an extraordinary size.

#### S E C T. IV.

##### OF THE MAGNITUDE, WEIGHT, AND DIFFERENT APPELLATIONS GIVEN TO THE OVUM AND CHILD.

WHEN the ovum descends into the uterus, it is supposed to be about the size of a poppy-seed, and in the third month augmented to the bigness of a goose-egg. Ten days after conception, the child (according to some authors) weighs half a grain ; at thirty days is increased to the weight of twenty-two grains ; at three months, weighs betwixt two and three ounces ; and at nine months, from ten to twelve, and sometimes sixteen pounds ; by which calculation it would appear that the progress of the foetus is quickest in the beginning of its growth ; for from the tenth to the thirtieth day (according to this supposition) it increases to three-and-forty times its weight. All these calculations are uncertain.

The conception is called an *embryo* until all the parts are distinctly formed, generally in the third month, and from that period to delivery, is distinguished by the appellation of *fœtus*.

#### S E C T. V.

##### OF TWINS.

WHEN two or more children are included in the uterus at the same time, each has a separate placenta with umbilical cords and vessels ; sometimes these placentæ are altogether distinct, and at other times they form but one cake.

Yet, by an instance that lately fell under my observation, it appears that sometimes twins have but one placenta in common. Whether or not they were two sets of membranes, I could not discover, because they had been torn off by the gentleman who delivered the woman ; but when the artery in one of the navel-strings was injected, the matter flowed out at one of the vessels belonging to the other ; and the communication between them is still visible, though they are separated at the distance of three or four inches.

When two children are distinct, they are called *twins*, and *monsters* when they are joined together ; the first (according to the foregoing theory) are produced when different animalcula impregnate different ova ; and the last are engendered when two or more animalcula introduce themselves, and are included in one ovum. See tab. x.

#### S E C T. VI.

##### OF SUPERFETATION,

IT was formerly imagined that a woman might conceive a second time during pregnancy, and be delivered of one child some weeks or months before the other could be ready for the world ; but this opinion is now generally exploded ; because the ovum fills the whole fundus uteri, and the gelatinous substance already mentioned, locks up the neck and os internum, so as



to hinder more semen from entering the womb and impregnating a second egg in any subsequent coition. Wherefore, in all those cases which gave rise to this supposition, it may be taken for granted that the woman was actually with child of twins, one of which lying near the os internum, might chance to die and mortify, so as that the membranes give way, and the dead foetus is discharged, while the other remains in the uterus, and is delivered at the full time. On the other hand, by some accident, the first and largest may be born some days or weeks before the full time, and afterwards the os tince contract so as to detain the other till the due period. At other times the child that lies next to the fundus is the smallest, and follows after the birth of the other, sometimes dead and putrified, and sometimes in an emaciated condition. See collect. vi.

## S E C T. VII.

### O F A B O R T I O N S.

**A** MISCARRIAGE that happens before the tenth day was formerly called an *efflux*, because the embryo and secundines are not then formed, and nothing but the liquid conception or genitura is discharged. From the tenth day to the third month, it was known by the term *expulsion*, the embryo and secundines being still so small that the woman is in no great danger from violent flooding.

If she parted with her burthen betwixt that period and the seventh month, she was said to suffer an abortion; in which case she underwent greater danger, and was delivered with more difficulty than before; because the uterus and vessels being more distended, a larger quantity of blood was lost in a shorter time, the foetus was increased in bulk, and the neck of the womb is not yet fully stretched; besides, should the child be born alive, it will be so small and tender that it will not suck; and scarce receive any sort of nourishment.

When delivery happens between the seventh month and full time, the woman is said to be in labour. But, instead of these distinctions, if she loses her burthen at any time from conception to the seventh or eighth, or even in the ninth month, we now say indiscriminately, she has miscarried.

Hippocrates alledges that a child born in the seventh month, sometimes lives; whereas if it comes in the eighth, it will probably die; because all healthy children, says he, make an effort to be delivered in the seventh month; and if they are not then born, the nifus is repeated in the eighth, when the child must be weakened by its former unsuccessful attempt, and therefore not likely to live; whereas, should the second effort be deferred till the ninth, the foetus will by that time be sufficiently recovered from the fatigue it had undergone in the seventh. Experience, however, contradicts this assertion; for the older the child is, we find it always (*cæteris paribus*) the stronger, consequently the more hardy and easily nursed, neither is there any sufficient reason for adhering to the opinion of Pythagoras on this subject, who declares that number eight is not so fortunate as eleven or nine.

The common term of pregnancy is limited to nine solar months, reckoning from the last discharge of the catamenia; yet in some, though very few, uterine gestation exceeds that period; and as this is a possible case, we ought always to judge on the charitable side, in the persuasion that it is better several guilty persons should escape, than one innocent person suffer in point of reputation. See collect. vii.



## S E C T. VIII.

## OF FALSE CONCEPTIONS AND MOLES.

IT was formerly supposed, that if the parts of the embryo and secundines were not separated and distinctly formed from the mixture of the male and female semen, they formed a mass, which, when discharged before the fourth month, was called a *false conception*; if it continued longer in the uterus so as to increase in magnitude, it went under the denomination of a *mola*. But these things are now to be accounted for in a more probable and certain manner. Should the embryo die (suppose in the first or second month) some days before it is discharged, it will sometimes be entirely dissolved; so that when the secundines are delivered, there is nothing else to be seen. In the first month the embryo is so small and tender, that this dissolution will be performed in twelve hours; in the second month, two, three, or four days will suffice for this purpose; and even in the third month, it will be dissolved in fourteen or fifteen; besides, the blood frequently forms thick laminæ round the ovum, to the surface of which they adhere so strongly, that it is very difficult to distinguish what part is placenta, and what membrane. Even after the embryo and placenta are discharged in the second or third month, the mouth and neck of the womb are often so closely contracted, that the fibrous part of the blood is retained in the fundus, sometimes to the fifth or seventh day; and when it comes off, exhibits the appearance of an ovum, the external surface, by the strong pressure of the uterus, resembling a membrane; so that the whole is mistaken for a false conception.

This substance, in bigness, commonly equals a pigeon or hen-egg; or if it exceeds that size, and is longer retained, is distinguished by the appellation of *mola*; but this last generally happens in women betwixt the age of forty and fifty, or later, when their menses begins to disappear; sometimes from external or internal accidents that may produce continued floodings. If the catamenia have ceased to flow for some time in elderly women, and return with pain, such a symptom is frequently the forerunner of a cancer; before or after this happens, sometimes a large flesh-like substance will be discharged with great pain, resembling that of labour; and upon examination, appears to be no more than the fibrous part of the blood, which assumes that form by being long pressed in the uterus or vagina. See collect. viii.

In this place it will not be amiss to observe, that the glands of the uterus and vagina will sometimes increase and distend the adjacent parts to a surprising degree. If, for example, one of the glands of the uterus be so obstructed as that there is a pressure on the returning vein and excretory duct, the arterial blood will gradually stretch the smaller vessels, and consequently increase the size of the gland, which will grow larger and larger, as long as the force of the impelled fluid is greater than the resistance of the vessels that contain it; by which means a very small gland will be enlarged to a great bulk, and the uterus gradually stretched as in uterine gestation, though the progress may be so slow as to be protracted for years instead of months. Nevertheless the os internum will be dilated, and the gland (if not too large to pass) will be squeezed into the vagina, provided it adheres to the uterus, by a small neck; nay, it will lengthen more and more, so as to appear on the outside of the os externum; in which case it may be easily separated by a ligature. This disease will be the sooner known and easier remedied, the lower its origin in the uterus is. But should the gland

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take its rise in the vagina hard by the mouth of the womb, it will shew itself still sooner; and a ligature may be easily introduced, provided the tumour is not so large as to fill up the cavity, and hinder the neck of it from being commodiously felt. Though the greatest difficulty occurs when the gland is confined to the uterus, being too much enlarged to pass through the os internum.

Sometimes all or most of the glands of the uterus are thus affected, and augment the womb to such a degree, that it will weigh a great many pounds, and the woman is destroyed by its pressure upon the surrounding parts; but should this indolent state of the tumour be altered by any accident that will produce irritation and inflammation, the parts will grow scirrhus, and a cancer ensue.

This misfortune for the most part happens to women when their menstrual evacuations leave them; and sometimes (though seldom) to child-bearing women, in consequence of severe labour.

Some people have affirmed that the placenta, being left in the uterus after the delivery of the child, grows gradually larger. But the contrary of this assertion is proved by common practice; from which it appears, that the placenta is actually pressed into smaller dimensions, and sometimes into a substance almost demi-cartilaginous; for, after the death or delivery of the child, the secundines receive no farther increase or growth. Dropsies and hydatides are also supposed to be formed in the uterus, and discharged from thence together with air or wind. The ovaria are sometimes affected in the same manner, are inflamed, impostumate, grow scirrhus, cancerous; and the patient is destroyed by the discharge which gradually fills the abdomen with pus and ichor; so that all these complaints, if known, ought to be obviated in the beginning. See collect. ix.

## S E C T. IX.

### OF THE PLACENTA AND MEMBRANES.

I HAVE already observed, that the ovum is formed of the placenta with the chorion and amnion, which are globularly distended by the inclosed waters that surround the child. The placenta is commonly of a round figure; somewhat resembling an oat-cake, about six inches in diameter, and one inch thick in the middle, growing a little thinner towards the circumference; it is composed of veins and arteries, which are divided into an infinite number of small branches, the venous parts of which unite in one large tube, called the *umbilical vein*, which brings back the blood, and is supposed to carry along the nutritive fluid from the vessels of the chorion and placenta, to the child, whose belly it perforates at the navel; from thence passing into the liver, where it communicates with the vena portarum and cava. It is furnished with two arteries, which arise from the internal iliacs of the child, and running up on each side of the bladder; perforate the belly where the umbilical vein entered; then they proceed to the placenta, in a spiral line, twining around the vein, in conjunction with which they form the funiculus umbilicalis, which is commonly four or five hand-breadths in length, sometimes only two or three, and sometimes it extends to the length of eight or ten. The two arteries, on their arrival at the inner surface of the placenta, are divided and subdivided into minute branches, which at last end in small capillaries, that inosculate with the veins of the same order. These arteries, together with the umbilical vein, are

supposed to do the same office in the placenta which is afterwards performed in the lungs by the pulmonary artery and vein, until the child is delivered and begins to breathe; and this opinion seems to be confirmed by the following experiments:—If the child and placenta are both delivered suddenly, or the last immediately after the first, and if the child, though alive, does not yet breathe, the blood may be yet felt circulating sometimes slowly, at other times with great force, through the arteries of the funis to the placenta, and from thence back again to the child, along the umbilical vein. When the vessels are slightly pressed, the arteries swell between the pressure and the child, while the vein grows turgid between that and the placenta, from the surface of which no blood is observed to flow, although it be lying in a basin among warm water. As the child begins to breathe, the circulation, though it was weak before, immediately grows stronger and stronger; and then in a few minutes the pulsation in the navel-string becomes more languid, and at last entirely stops. If after the child is delivered, and the navel-string cut, provided the placenta adheres firmly to the uterus, which is thereby kept extended; or (if the womb is still distended by another child) no more blood flows from the umbilical vessels than what seemed to be contained in them at the instant of cutting; and this, in common cases, does not exceed the quantity of two or three ounces. And finally, when, in consequence of violent floodings, the mother expires either in time of delivery or soon after it, the child is sometimes found alive and vigorous, especially if the placenta is sound; but if torn, then the child will lose blood as well as the mother.

The external surface of the placenta is divided into several lobes, that it may yield and conform itself more commodiously to the inner surface of the uterus, to which it adheres, so as to prevent its being separated by any shock or blows upon the abdomen, unless when violent.

These groups of veins and arteries which enter into the composition of the placenta, receive external coats from the chorion, which is the outward membrane of the ovum, thick and strong, and forms three-fourths of the external globe that contains the waters and the child, the remaining part being covered by the placenta; so that these two in conjunction constitute the whole external surface of the ovum. Some indeed alledge, that these are enveloped with a cribriform or cellular substance, by which they seem to adhere, by contact only, to the uterus; and that the inner membrane of the womb is full of little glands, whose excretory ducts, opening into the fundus and neck, secrete a soft thin mucus (as formerly observed) to lubricate the whole cavity of the uterus, which beginning to stretch in time of gestation, the vessels that compose these glands are also distended; consequently a greater quantity of this mucus is separated and retained in this supposed cribriform or cellular substance, the absorbing vessels of which, take it in and convey it along the veins for the nourishment of the child. The womb being therefore distended in proportion to the increase of the child, those glands are also proportionally enlarged; by which means a larger quantity of the fluid is separated, because the nutriment of the child must be augmented in proportion to the progress of its growth; and this liquor undergoes an alteration in quality as well as quantity, being changed from a clear thin fluid into the more viscous consistence of milk. In some cases, this mucus hath been discharged from the uterus in time of pregnancy, and both mother and child weakened by the evacuation; which may be occasioned by the chorion adhering too loosely, or being in one part actually separated from the womb.

Formerly



Formerly, it was taken for granted by many, that the placenta always adhered to the fundus uteri. But this notion is refuted by certain observations; in consequence of which we find it as often sticking to the sides, back, and fore parts, and sometimes as far down as the inside of the os uteri. See tab. v, vi, viii, ix, x, xi, xiii.

When the placenta is delivered, and no other part of the membrane torn except that through which the child passed, the opening is generally near the edge or side of the placenta, and seldom in the middle of the membranes; and a hog's bladder being introduced at this opening, and inflated, when lying in water, will shew the shape and size of the inner surface of the womb, and plainly discover the part to which the placenta adhered.

The chorion is, on the inside, lined with the amnion, which is a thin transparent membrane, without any vessels so large as to admit the red globules of blood; it adheres to the chorion by contact, and seems to form the external coat of the funis umbilicalis.

This membrane contains the serum in which the child swims; which fluid is supposed to be furnished by lymphatic vessels that open into the inner surface of the amnion. If this liquid is neither absorbed into the body of the foetus, nor taken into the stomach by suction at the mouth, there must be absorbing vessels in this membrane, in the same manner as in the abdomen and other cavities of the body, where there is a constant renovation of humidity.

The quantity of this fluid, in proportion to the foetus, is much greater in the first than in the last month of gestation, being in the one perhaps ten times the weight of the embryo, whereas in the other it is commonly in proportion of one to two; for six pounds of water surrounding a foetus that weighs twelve pounds, is reckoned a large proportion, the quantity being often much less; nay, sometimes there is very little or none at all.

In most animals of the brute species, there is a third membrane, called *alantois*, which resembles a long and wide blind-gut, and contains the urine of the foetus. It is situated between the chorion and amnion, and communicates with the urachus that rises from the fundus of the bladder, and runs along with the umbilical vessels, depositing the urine in this reservoir, which is attached to its other extremity. This bag hath not yet been certainly discovered in the human foetus, the urachus of which, though plainly perceivable, seems hitherto to be quite imperforated.

From the foregoing observations upon nutrition, it seems probable, that the foetus is rather nourished by the absorption of the nutritive fluid into the vessels of the placenta and chorion, than from the red blood circulated in full stream from the arteries of the uterus to the veins of the placenta, and returned by the arteries of the last to the veins of the first, in order to be renewed, refined, and made arterial blood in the lungs of the mother.

Yet this doctrine of absorption is clogged with one objection, which hath never been fully answered; namely, that if the placenta adheres to the lower part of the uterus, when the os internum begins to be dilated, a flooding immediately ensues; and the same symptom happens upon a partial or total separation of the placenta from any other part of the womb; whereas no such consequence follows a separation of the chorion.

The new theorists indeed observe, that there is no necessity for a supply of red blood from the mother; because the circulating force in the vessels of the foetus produces heat and motion sufficient to endue the fluids with a sanguine colour; that neither is there occasion for returning and refining this blood in the lungs of the mother, because that



office is sufficiently performed in the placenta, until the foetus is delivered, when its own lungs are put to their proper use; and lastly, that the blood of the mother is too gross a fluid to answer the occasions of the foetus. Certain it is, the chick in the egg is nourished by the white which is forced along the vessels, and the quantity of red blood increases in proportion to the growth of the contained embryo or foetus, without any supply from the hen.

On the whole, the opinions broached upon the nutrition of the embryo and foetus in utero have been various, as well as those that are adopted concerning the modus of conception.

## B O O K II.

### C H A P. I.

*Of the Diseases incident to pregnant Women; which if not carefully prevented or removed, may be of dangerous Consequence both to Mother and Child.*

#### S E C T. I.

#### OF NAUSEA AND VOMITING.

**T**HE first complaint attending pregnancy, is the nausea and vomiting, which in some women begin soon after conception, and frequently continue till the end of the fourth month. Most women are troubled with this symptom more or less, particularly vomiting in the morning. Some who have no such complaint in one pregnancy, shall be violently attacked with it in another; and in a few, it prevails during the whole time of uterine gestation.

The vomiting, if not very violent, is seldom of dangerous consequence; but, on the contrary, is supposed to be serviceable to the patient, by unloading the stomach of superfluous nourishment, thereby carrying off or preventing too great a turgency in the vessels of the viscera and uterus; and by creating a kind of straining or nifus in the parts, which will assist the fundus and neck of the womb in stretching. Nevertheless, if the straining is too great, it may endanger a miscarriage.

Perhaps this complaint is occasioned by a fulness of the vessels of the uterus, owing to obstructed catamenia, the whole quantity of which cannot as yet be employed in the nutrition of the embryo; over and above this cause, it has been supposed that the uterus being stretched by the increase of the ovum, a tension of that part ensues, affecting the nerves of that viscus, especially those that arise from the sympathetici maximi, and communicate with the plexus at the mouth of the stomach. Whatever be the cause, the complaint is best relieved by bleeding more or less, according to the plethora and strength of the patient; and if she is costive, by emollient clysters and opening medicines, that will evacuate the hardened contents of the colon and rectum; so that the viscera will be rendered light and easy, and the stretching fulness of the vessels taken off. A light, nutritive

nutritive, and spare diet, with moderate exercise, and a free open air, will conduce to the removal of this complaint. See collect. x. No. 1.

### S E C T. II.

OF THE DIFFICULTY IN MAKING WATER; COSTIVENESS; SWELLING OF THE HÆMORRHOIDS, LEGS, AND LABIA PUDENDI; AND THE DYS-PNŒA AND VOMITING AT THE LATTER END OF PREGNANCY.

**T**OWARDS the end of the fourth month, or beginning of the fifth, the uterus is so much distended as to fill all the upper part of the pelvis, and then begins to rise upward into the abdomen; about the same time the os internum is likewise raised and turned backward toward the sacrum, because the fundus is inclined forward in its rise. The uterus, according to the different directions in which it extends, produces various complaints by its weight and pressure upon the adjacent parts, whether in the pelvis, or higher in the abdomen. In the fourth or fifth month, it presses against the sphincter of the bladder in the pelvis, and produces a difficulty in making water, and sometimes (though seldom) a total suppression. This complaint will happen, if the womb is sunk too low in the vagina; or if the ovum, instead of adhering to the fundus, descends into the wide part in the middle of the neck, which accordingly undergoes distension. This disposition of the ovum is frequently the cause of abortion, because the mouth and neck being in this case, from the stretching, the weakest part of the uterus, the os internum begins to be opened too soon; yet sometimes this will continue strong and rigid; and after the neck is enlarged, the fundus will be, last of all, stretched to the end of gestation, and the woman be happily delivered.

This is one probable reason to account for the placenta sometimes adhering over the inside of the mouth of the womb, and helps to support the theory of the neck turning shorter and shorter as the full time approaches.

But, as the stretching begins lower down in this than in a common case, the uterus must consequently press against all parts of the pelvis before it can rise above the brim; and this pressure sometimes produces an obstruction of urine and difficulty in going to stool; the general compression of all these parts, will be attended with a degree of inflammation in the substance of the uterus, the vagina, mouth of the bladder, and rectum; from whence violent pains and a fever will ensue. In order to remove or alleviate these symptoms, recourse must be had to bleeding and clysters, the urine must be drawn off by the catheter, fomentations and warm baths be used, and this method occasionally repeated until the complaints abate; and they commonly vanish in consequence of the womb rising higher, so as to be supported on the brim of the pelvis. See collect. x. No. 2. and tab. vi. fig. 2.

By the pressure of the uterus upon the upper part of the rectum and lower part of the colon, where it makes semicircular turns to the right and left, the feces are hindered from passing, and by remaining too long in the guts are indurated, the fluid parts being absorbed. Hence arise violent straining at stool, and a compression of the womb, which threatens abortion. When the patient therefore has laboured under this symptom for several days, let emollient, laxative, and gently-stimulating clysters be injected. But if the rectum be so obstructed as that the injection cannot pass, suppositories are first to be introduced; for frequently, when the colon and rectum are compressed by the uterus, the peristaltic motion

is weakened and impeded, so that the guts cannot expel their contents; in which case, the suppository, by irritation, quickens this faculty, and in dissolving, lubricates the parts, thereby facilitating the discharge of the hardened fæces. This previous measure being taken, a clyster ought to be injected, in order to dissolve the collected and indurated contents of the colon, as well as to lubricate and stimulate the inside of that intestine, so as to effect a general evacuation; and for this purpose, a syringe should be used instead of a bladder, that the injection may be thrown up with greater efficacy and force.

These clysters ought to be repeated until the hardened fæces are altogether brought away, and the last discharge appears of a soft consistence. Neither ought the prescriber to trust to the reports of the patient or nurse, but to his own senses, in examining the effects of these injections; for, if the complaint has continued several days, a large quantity of indurated fæces ought to be discharged. To avoid such inconvenience for the future, an emollient clyster must be injected every second night; or, if the patient will not submit to this method, which is certainly the easiest and best, recourse must be had to those lenients mentioned at the latter end of this section. For when the fæces are long retained, the air rarefies, expands, and stretches the colon, producing severe colic pains; this being the method followed by nature, to disburthen herself when she is thus encumbered. See collect. x. No. and tab. vi. fig. 2.

The pressure of the uterus upon the hæmorrhoidal and internal iliac veins, produces a turgency and tumefaction of all the parts below, such as the pudenda, vagina, anus, and even the os internum and neck of the womb. This tumefaction of the hæmorrhoidal veins, appears in those swellings at the inside and outside of the anus, which are known by the name of the external and internal hæmorrhoids, or piles. This is a complaint to which women are naturally more subject than the other sex; but it is always more violent at the time of pregnancy, when the same method of cure may be administered as that practised at other times, though greater caution must be used in applying leeches to the parts; because, in this case, a great quantity of blood may be lost before the discharge can be restrained. See collect. x. No. 3.

About the latter end of the fifth or in the beginning of the sixth month, the uterus being stretched above the brim, and the fundus raised to the middle space betwixt the os pubis and navel, is considerably increased in weight; and even then (though much more so near the full time) lies heavy upon the upper part of the brim, presses upon the vertebræ of the loins and ossa ilia, and, rising still higher with an augmented force, gradually stretches the parietes of the abdomen, pushing the intestines upwards and to each side.

The weight and pressure on the external iliac veins are attended with a surcharge or fullness in the returning vessels that come from the feet, legs, and thighs; and this tumefaction produces œdematous and inflammatory swellings in these parts, together with varicous tumours in the veins, that sometimes come to suppuration.

The same weight and pressure occasion pains in the belly, back, and loins, especially towards the end of the eighth or in the ninth month. If the uterus rises too high, a dyspnœa or difficulty of breathing, and frequent vomitings, ensue; the first proceeds from the confinement of the uterus and diaphragm in respiration, the liver and viscera of the abdomen being



being forced up into the thorax ; and the last is occasioned by the extraordinary pressure upon the stomach. See collect. x. No. 4.

All the complaints above described, namely, swelling of the legs, thighs, and labia pudendi, pains in the back, loins, and belly, with dyspnœa and vomiting, are removed or palliated by the following method:—The patient, if she can bear such evacuations, is generally relieved by bleeding at the arm or ankle, to the amount of eight or ten ounces ; but the quantity must be proportioned to the emergency of the case ; the belly must be kept open and easy with emollient clysters and laxative medicines, such as a spoonful or two of a mixture composed of equal parts of ol. amygd. d. and syr. violar. taken every night ; or from two drachms to half an ounce of manna, or the same quantity of lenitive electuary ; a small dose of rhubarb, or five grains of any opening pill, unless the patient be troubled with the hæmorrhoids, in which case all aloetic medicines ought to be avoided. The patient must not walk much, or undergo hard exercise, but rest frequently upon the bed, and lie longer than usual in the morning. When the swelling of the legs is moderate, and only returns at night, rollers or the laced stocking may be serviceable ; but when it extends in a great degree to the thighs, labia pudendi, and lower part of the belly, in a woman of a full habit of body, venæsection is necessary, because this œdematous swelling proceeds from a compression of the returning veins, and not from laxity, as in the anasarca and leucophlegmatic constitutions. Here moderate exercise, and (as I have already observed) frequent resting on a bed or couch, is beneficial ; or if the skin of the leg and pudenda is excessively stretched, so as to be violently pained, the patient will be greatly relieved by puncturing the parts occasionally. But these complaints cannot be totally removed till delivery, after which they commonly vanish of themselves.

The bellies of those that are indolent and use no exercise, ought to be moderately compressed, so that the uterus may not rise too high, and occasion difficulty in breathing, and vomiting, in the last months ; but they must not be too straitly swathed, lest the womb should be determined, in stretching over the pubes, and produce a pendulous belly, which is often the cause of difficult labours. A medium ought, therefore, to be preserved in this article of compressing, and no woman lace her jumps or stays so as to make herself uneasy ; while the diet, air, and exercise, ought to be regulated according to the constitution, custom, and complaints of the patient.

## C H A P. II.

### *Diseases incident to Pregnant Women, continued.*

#### S E C T. I.

##### OF THE STONE IN THE KIDNEYS AND BLADDER.

**W**OMEN are frequently afflicted with small stones and gravel in the kidneys, being less subject than men to this complaint in the bladder, because their urethras are short and wide, and suffer the calculous concretions to pass with the urine more easily.

In pregnancy, it is often difficult to distinguish gravelly pains from those that are felt in the small of the back and loins, proceeding from the pressure of the uterus upon these parts. In both cases, when the

pains



pains are violent, the urine is high-coloured; and the difference is, that in the gravel a quantity of sand generally falls to the bottom; though the sediment commonly deposited by high-coloured urine, is often mistaken for gravel; a mistake, however, which is the less material, because both complaints are relieved by the same method, namely, venæsection, emollient clysters, emulsions, with gum arabic, infusions of althea, sem. lini, and opiates, and an application of emplast. roborans to the back.

Pains in the loins and belly, extending to the false ribs, occasioned by the stretching of the uterus, are eased by rubbing and anointing the parts every night, before the fire, with emollient unguents, such as that of althea, &c.

In pregnant women, the complaints from a stone in the bladder (which is sometimes, though seldom, the case) are to be treated in the same manner as at any other time; except that, when the patient is near delivery, it is not advisable to endeavour to extract it, lest the operation should be attended with an inflammation of the urethra and vagina. If therefore the stone should be rough, angular, or surrounded with sharp prickles, the woman suffers greatly from the pressure of the uterus upon the bladder, especially in time of labour, when the membranes are broke, and the head of the child is pushed into the upper part of the pelvis; because the stone is then pressed before it, upon the neck of the bladder, so as to occasion exquisite torture, and infallibly retard the labour-pains. If the stone hath descended into the meatus urinarius, perhaps it may be easily extracted; but if it still remains within the bladder, the only way of relieving the patient is by introducing a catheter, also one or two fingers in the vagina, to push up the stone above and behind the head of the child; or, if this cannot be done, to turn and deliver by the feet, before the head is pressed too far down in the pelvis. See collect. xi. No. 1.

## S E C T. II.

### OF HERNIAS OR RUPTURES.

**WOMEN** are also afflicted with ruptures in different parts, such as the navel, groin, and pelvis; but as the uterus in time of gestation stretches higher and higher, the omentum and intestines are pressed more and more upward and to each side; and about the fifth or sixth month, the womb rises so high, that the intestine cannot descend into the groin, and the rupture in that part ceases for the present. About the eighth month, the uterus is so high advanced, that the intestine or epiploon is kept from pushing out at the navel, consequently the umbilical hernia is likewise suspended till after delivery; but this will not happen in either case, unless the rupture be of that kind which suffers the omentum and intestine to be easily reduced.

Women are also subject to ruptures of the umbilicus, and those of the groin most incident to the other sex; but there is a third kind peculiar to women, though it rarely happens even in them; this is produced from the intestine falling down betwixt the back part of the uterus and vagina, and the fore part of the rectum. The peritonæum descends much lower in this place than at the anterior descent, where it covers the upper part of the bladder, or at the sides of the pelvis, where it forms the ligamenta lata; for it reaches to within one or two inches of the perinæum; and the intestines pressing it farther down, or bursting it in this part, are pushed out in the form of a large tumour, at the side of the perinæum, betwixt the lower part of the ischium and coccyx. The gut being so situated in time of labour,

when

when the child's head is squeezed into the pelvis, may suffer strangulation, if the case should prove lingering and tedious, and the pressure continue for any length of time. In order to prevent or remedy this accident; let the os externum be gradually opened with the hand, which being introduced in the vagina, should raise the child's head, so as to suffer the intestine to be pushed above it, by the assistance of the other hand, which presses upon the outside; in this manner, both hands may be used alternately, till the purpose be effected; or, should this method fail to reduce and retain the intestine, the child must be delivered with the forceps, or turned and brought by the feet, as we have directed in the case of a stone in the bladder. The ruptures of the umbilicus and groin may be restrained and kept up by proper compression, but it is very difficult to contrive an effectual bandage for the descent in the perinæum. See collect. xi. No. 2.

## S E C T. III.

## O F D R O P S I E S.

**D**IFFICULTY in breathing, in pregnant women, may be occasioned by collections of matter in the chest or thorax, as well as in the abdomen; from abscesses in the viscera co-operating with the pressure of the uterus upon the organs of respiration; these complaints (which are generally fatal) must be treated by the same method in pregnancy which is used at other times. The cavity of the abdomen is also subject to an ascites or dropsy, with or without hydatides, which in conjunction with the stretching uterus; may distend the belly to a prodigious size, producing great oppression and anxiety. Here too, the common method of curing or palliating dropsies must be used; with this difference, that the purging medicines are to be cautiously prescribed. See collect. xi. No. 3.

But this disorder is not so incident to pregnant women as the anasarca; which is a dropsy of the cellular membrane, that extends over the whole surface of the body, enveloping every individual muscle, vessel, and fibre. This disease is the effect of universal laxity and weakness, and, if not timely obviated, may endanger the patient's life, being sometimes attended with a fatal rupture of the uterus in time of labour; in order to prevent which catastrophe, every thing ought to be prescribed in point of diet, medicine, and exercise, which may contribute to strengthen the solids and quicken the circulation. Let her, for example, take repeated doses of the confect. cardiaca, drink moderate quantities of strong wine, in which the warm spices have been infused, eat no meat but such as is roasted and high-seasoned, and abstain altogether from weak diluting fluids, such as small-beer and water.

## S E C T. IV.

O F I N C O N T I N E N C E O F U R I N E A N D D I F F I C U L T Y I N M A K I N G  
W A T E R, A T T H E L A T T E R E N D O F P R E G N A N C Y  
A N D I N T I M E O F L A B O U R.

**T**H E vesica urinaria, in pregnant women near their full time, is often so much pressed by the uterus, that it will contain but a very small quantity of water; a circumstance, though not dangerous, extremely troublesome, especially when attended with a vomiting or cough; in which case, the straining forces out the water involuntarily, with great violence. The cough may be alleviated by proper remedies, but the vomiting can seldom

be removed. Sometimes a bandage applied round the lower part of the belly, and supported with the scapular, is of singular service, particularly when the uterus lies pendulous over the os pubis, thereby compressing the urinary bladder.

But this complaint is not of such dangerous consequence as a difficulty in making water, or a total suppression, which (as we have already observed) happens, though very seldom, in the fourth or beginning of the fifth month of pregnancy; but most frequently occurs in the time of labour, and after delivery. In the beginning of labour, before the membranes are broke, and the head of the child sunk into the passage, the woman commonly labours under an incontinence of urine from the pressure upon the bladder; but the membranes being broken, and the waters discharged, the uterus contracts, and the child's head is forced down into the pelvis, where, if it continues for any length of time, the urethra and sphincter vesicae are so compressed that the urine cannot pass; while the pressure on the other parts of the bladder, being removed in consequence of the diminished size of the uterus and the laxity of the parietes of the abdomen, the vesica urinaria is the more easily stretched by the increasing quantity of urine, which distends it to such a degree, that the fibres are over-strained; and after delivery, when the pressure is removed from the sphincter and meatus urinarius, it cannot contract so as to discharge its contents, especially if any swelling or inflammation remains from the pressure upon the neck and urethra; in which case the patient is afflicted with violent stretching pains in the loins, back, groin, and particularly above the os pubis.

This complaint is immediately removed by drawing off the urine with a catheter; and indeed this experiment ought to be tried before delivery, as it must infallibly promote labour, because one pain interferes with the other. If the inflammation continues or increases, and the obstruction of urine recurs after delivery, the external parts ought to be fomented with warm stupes; bladders half filled with warm water or emollient decoctions may be applied, as hot as the patient can bear them, to all the lower parts of the belly; and the catheter be used twice a day, or as often as necessity requires, until the bladder shall have recovered its tone, so as to perform its office without assistance.

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### S E C T. V.

#### OF THE FLUOR ALBUS IN PREGNANT WOMEN.

THIS discharge, to which women are more subject at other times than during uterine gestation, if in a large quantity, may hinder conception. In those who are usually troubled with it, the complaint generally ceases all the time of pregnancy; in some, however, it continues to the last, provided the seat of it is the vagina; and the evacuation is sometimes so great as to weaken both mother and child, and even to produce a miscarriage. Every thing that strengthens and nourishes the body is here of service. This is also supposed to happen, when some part of the chorion being separated from the uterus, the fluid that is separated by the colatura lactea for the nutrition of the foetus, forces its way through the os internum; and the greater this separation is, and the nearer the full time, the larger the discharge will be.



## S E C T. VI.

## OF THE GONORRHOEA AND LUES VENEREA.

**T**HOUGH women are not so soon affected with this distemper as men, they are commonly cured with greater difficulty, because of the great moisture and laxity of the parts affected; especially in pregnant women, who nevertheless are to be treated in the same method as practised at other times, except that in this case mercurials and cathartics ought to be very cautiously used; for if the gonorrhœa be neglected or unskilfully managed, the virus will increase, and actually degenerate into a confirmed pox. It is often difficult to distinguish a gonorrhœa from the fluor albus, because the colour and quantity of the discharge is nearly the same in both; in the last, however, we seldom meet with inflammation or ulcers within the labia or entrance of the vagina; whereas in the first, these generally appear, soon after the infection, about the meatus urinarius, the carunculæ myrtiformes, and inside of the labia, producing a violent pain in making water. The gonorrhœa is likewise distinguished from the fluor albus by its continuing all the time of the menstrual discharge, during which the other complaint is commonly suspended; but this mark is at best but uncertain, and can be of no service in pregnancy, because then the menses themselves are obstructed. The cure is best attained by bleeding; repeated doses of gentle cathartics, mixed with mercurials; a low diet; emulsions impregnated with nitre; and lastly, balsamic, strengthening, and astringent medicines.

If the distemper hath proceeded to an inveterate degree of the second infection, attended with cancerous ulcerations of the pudenda, buboes in the groin, ulcers in the nose and throat, so that the life of the patient or constitution of the parts are endangered, mercurials must be given, so as to raise a gentle degree of salivation; which ought to be immediately restrained, and even carried off, by mild purgatives, and renewed occasionally, according to the strength of the woman, until the virus be utterly discharged. Here, however, a great deal must depend upon the judgement and discretion of the prescriber, who, rather than propose any thing that might occasion abortion, ought to try, by palliating medicines, to alleviate and keep under the symptoms till after delivery. See collect. xi. No. 4.

## C H A P. III.

## OF MISCARRIAGES.

**M**OST of the complaints above described, if violent and neglected, may occasion a miscarriage; and it would be almost an endless task to enumerate every accident from which this misfortune may proceed. I shall therefore content myself with describing in what manner abortion happens; first, in the death of the child; secondly, in the separation of the placenta; and lastly, in whatever may occasion too great extension of the neck and of the os internum.

## S E C T. I.

## OF THE CHILD'S DEATH.

**T**HIS may proceed from diseases peculiar to itself, not to be accounted for, as well as from divers accidents that befall it in the womb. If, for example, the navel-string be long, and the quantity of surrounding waters great,



the foetus, while young, may in swimming form a noose of the funis; through which if the head only passes, a circumvolution will happen round the neck or body; but should the whole foetus pass or thread this noose, a knot will be formed on the navel-string, which, if tight drawn, will absolutely obstruct the circulation. This may likewise be the case when the waters are in very small quantity, and the funis umbilicalis falls down before the head, by which it is violently compressed. In short, the death of the foetus will be effected by all circumvolutions, knots, or pressure upon the navel-string, which destroy the circulation betwixt the placenta and the child.

The foetus may suffer death from diseases and accidents that happen to the mother; from violent passions of joy, fear, or anger, suddenly raised to such transports as occasion tremors, fainting or convulsions; and from a plethora, and all acute distempers in which the circulating force of the fluids is too violent.

The child being dead, and the circulation in the secundines consequently destroyed, the uterus is no longer stretched; the foetus, if large, is no longer felt to move or stir; all the contained parts run gradually into a state of putrefaction; the resistance of the membranes becomes weaker than the contracting force of the uterus, joined with the pressure of the contents and parietes of the abdomen; the contained waters of consequence burst through their mortified inclosure; and the uterus is contracted close to its contents, which are therefore pressed down lower and lower; the neck and mouth of the womb being gradually stretched, labour comes on, and a miscarriage ensues.

At other times, gripings, looseness, and labour-pains, even before the membranes break, are occasioned by obstructions or resistance of the vessels of the uterus. In these cases, if no flooding happens, the woman is seldom in danger; and, though the child is known to be dead, the progress of nature is to be waited for with patience. If the woman is weak, exhausted, or timorous, she must be encouraged and fortified with nourishing diet; if plethoric, she must undergo evacuation by bleeding and laxative medicines; and when labour begins, be assisted according to the directions specified in the sequel. See collect. xii. No. 1.

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### S E C T. II.

#### OF THE SEPARATION OF THE PLACENTA FROM THE UTERUS.

**T**HIS separation may proceed from all the foregoing diseases and accidents that happen to the mother; from violent shocks, strains, over-reachings, falls, and bruises on the abdomen; as also from vehement coughs, vomitings, or strainings at stool when the body is costive. The separation of the placenta is always accompanied with a discharge of blood from the vessels of the uterus, more or less, according to the term of pregnancy, or as the placenta is more or less detached.

The younger the woman is with child, the danger is the less; because, though a considerable quantity of blood be lost, it does not flow with such violence as to exhaust her immediately; and therefore she may be supported and her spirits kept up with proper cordials and nutritive diet. But when such an hæmorrhage happens in any of the three or four last months of pregnancy, the danger is much more imminent, especially towards the full time; because the vessels of the uterus being then largely distended, a much greater quantity of blood is lost in a shorter time; yet in both cases, the

floorings

floodings will be more or less, as there is more or less of the placenta separated from the womb; and when this happens in a very small degree, the discharge may by right management be sometimes stopped, and every thing will happily proceed to the full time. But if this purpose cannot be effected in a woman young with child, the principal intention ought to be a mitigation of the hæmorrhage, leaving the rest to time and patience, as a miscarriage in the first five months is seldom attended with hazard. On the contrary, nothing can be more dangerous than such an effusion in any of the four last months, provided it cannot be immediately restrained. In this case we are often deceived by a short intermission, occasioned by coagulated blood that locks up the mouth of the womb, which being pushed off, the flooding returns; and hence we account for its returning so commonly upon motion, a fit of coughing, straining at stool, or any effort whatever.

It is happy for the woman in this case, when she is so near the full time that she may be sustained till labour is brought on; and this may be promoted, if the head presents, by gently stretching the mouth of the womb, which being sufficiently opened, the membranes must be broke; so that the waters being evacuated, the uterus contracts, the flooding is restrained, and the patient safely delivered. At any rate, if the hæmorrhage returns again with great violence, there is no other remedy than that of delivering with all expedition according to the method described in book iii. chap. iv, sect. 3. and book iv. chap. i. sect. 3.

Although the great danger is from floodings when near the full time, yet, if labour can be brought on, the os uteri is easily dilated with the labour or the hand; but in the sixth or seventh month, it takes longer time, and is stretched with greater difficulty, which is sometimes the occasion of the danger at that period.

The edge or middle of the placenta sometimes adheres over the inside of the os internum, which frequently begins to open several weeks before the full time; and if this be the case, a flooding begins at the same time, and seldom ceases entirely until the woman is delivered; the discharge may indeed be intermitted by coagulums that stop up the passage; but when these are removed, it returns with its former violence, and demands the same treatment that is recommended above.

In all cases and at all times of pregnancy, if the woman receives any extraordinary shock either in mind or body, if she is attacked by a violent fever, or any complaints attending a plethora, bleeding ought always to be prescribed by way of prevention or precaution, unless a low, weak, lax habit of body renders such evacuation unadvisable; but these are not so subject to fevers from fulness.

On the first appearance of flooding, the patient ought immediately to be bled to the amount of eight or twelve ounces, and venæsection repeated occasionally according to the strength of the constitution and emergency of the case. She ought to be confined to her bed, and be rather cool than warm. If costive, an emollient clyster must be injected in order to dissolve the hardened fæces, that they may be expelled easily without straining; internally, mulsion with nitre must be used, and mixtures of the tinct. rosar. rub. acidulated with spirit of vitriol, as the cooling or restraining method shall seem to be indicated; but above all things, opiates must be administered to procure rest, and quiet the uneasy apprehensions of the mind; for diet, let her use panada, weak broth, and rice-gruel; she may drink water in which a red-hot iron has been several times quenched, mixed with  
a small

a small proportion of burnt red-wine; she must abstain from all the high-seasoned foods, and even flesh-meat or strong broths, that will enrich the blood too fast, and quicken the circulation. But if, notwithstanding this regimen, the flooding shall continue and increase, so that the patient becomes faint and low with loss of blood, we must without farther delay attempt to deliver her, as in book iii. chap. ix. sect. 3; though this is seldom practicable, except in the last months of pregnancy, and then will be the easier performed the nearer she is to her full time, unless labour-pains shall have assisted or begun a dilatation of the os internum.

### S E C T. III.

#### OF COUGHS, VOMITINGS, &c.

**M**ISCARRIAGES may also be produced from every force that will stretch the neck and mouth of the womb; such as violent coughs, vomitings, costive strainings at stool, cathartics that bring on a superpurgation and tenesmus, together with frequent convulsions. All these symptoms must be treated in the usual method; the cough and vomiting may be abated or removed chiefly by venesection and opiates; the constipation, by clysters and gentle laxative medicines; the superpurgation, by opiates; the tenesmus, by these and oily injections; the convulsions, by bleeding and blisters; and as the more violent convulsions happen generally when the woman is near her full time, if they are not soon removed, but continue and increase to the manifest hazard of the patient's life, she ought to be delivered immediately in the same manner as in the case of a flooding in the last months. See collect. xii. No. 2.

### S E C T. IV.

#### OF LONGINGS.

**A**BORTION may be likewise occasioned by uncommon longings for things that cannot be soon or easily got, or such as the woman is ashamed to ask for, especially in her first child, namely, different kinds of food and drink. These appetites, if not gratified, sometimes produce a miscarriage; and indeed are supposed to affect the child in such a manner, that the body of it shall be impressed with marks resembling the figure or colour of what the mother longed for. These cravings, therefore, though they appear unreasonable and improper, must be satisfied; and the mother ought to shun every thing that is disagreeable to the senses, because miscarriage may also proceed from surprise at sight of strange and horrible objects. See collect. xii. No. 3.

## B O O K III.

### C H A P. I.

#### S E C T. I.

#### OF THE CHILD'S SITUATION IN THE UTERUS.

**T**HE embryo or fœtus, as it lies in the uterus, is nearly of a circular or rather oval figure, which is calculated to take as little space as possible. The chin rests upon the breast; the thighs are pressed along the



the belly; the heels applied to the breech; the face being placed between the knees while the arms cross each other round the legs. The head for the most part is down to the lower part of the uterus; and the child being contracted into an oval form, the greatest length is from head to breech; the distance from one side to the other is very much less than that from the fore to the back part; because the thighs and legs are doubled along the belly and stomach, and the head bended forward on the breast. The uterus being confined by the vertebræ of the loins, the distance from the back to the fore part of it must be less than from side to side; so that in all probability, one side of the fœtus is turned toward the back, and the other to the fore part of the womb; but as the back part of the uterus forms a small longish cavity on each side of the vertebræ, the fore parts of the fœtus may therefore, for the most part, tilt more backward than forward.

It has been generally supposed that the head is turned up to the fundus, and the breech to the os uteri, with the fore parts toward the mother's belly; and that it remains in this situation till labour begins, when the head comes downward, and the face is turned to the back of the mother. Some alledge, that the head precipitates about the end of the eighth or beginning of the ninth month, by becoming specifically heavier than the rest of the body. Others affirm, that as the child increases in bulk, especially during the two last months, the proportion of surrounding water must be diminished so as that it is confined in its motion, and in struggling to alter its position the head is moved to the os tincæ, where it remains till delivery. The particulars of this and other theories, may be found in Mauriceau, La Motte, Simpson, and Oald. But from the following observations it seems more probable, that the head is for the most part turned down to the lower part of the uterus, from conception to delivery.

In the first month, according to some writers, the embryo exhibits the figure of a tadpole, with a large head and small body or tail, which gradually increases in magnitude, till the arms and thighs begin to bud or start out, like small nipples, from the shoulders and breech; two black specks appear on each side of the head, with a little hole or opening between them, which, in the second month, are easily distinguished to be the eyes and mouth. (See tab. v. fig. 3.) The legs and arms are gradually formed, while the body turns larger; but the fingers are not separate or distinct, till the latter end of the second or the beginning of the third month. (See tab. vi. fig. 1.) This is commonly the case, but sometimes the bulk and appearance differ considerably in different embryos of the same age. The younger the embryo, the larger and heavier is the head in proportion to the rest of the body; and this is the case in all the different gradations of the fœtus; so that, when dropped or suspended by the navel-string in water, the head must sink lowermost of course. Besides, when women miscarry, in the fourth, fifth, sixth, and seventh months, the head, for the most part, presents itself, and is first delivered. (See tab. vi. viii.) By the touch in the vagina, the head is frequently felt in the seventh, sometimes in the sixth, but more frequently in the eighth month; and if the same women are thus examined from time to time till the labour begins, the head will always be felt of a round firm substance at the fore part of the brim of the pelvis, betwixt the os internum and pubes, through the substance of the vagina and uterus. (See tab. ix. xi.) But all these opinions are liable to objections. If the descent of the head proceeded from its specific gravity, we should always find it at the os internum, because this reason would always prevail; if it were not owing to a diminished proportion of water, why should



should we find the breech presented, even where there is a quantity of that fluid large enough to give the head free liberty to rise again toward the fundus, or (according to the other opinion) to sink down, by its specific gravity, to the os internum? Some, indeed, suppose, that the head always presents itself, except when it is hindered by the funis umbilicalis twisting round the neck and body, so as to impede the natural progress. But, were this supposition just, when we turn and deliver by the feet those children that presented in a preternatural way, we should always find them more or less circumvolved by the navel-string; whereas I have as often found the funis twisted round the neck and body, when the head presented, as in any other case; and when other parts offered, have frequently delivered the child without finding it in the least entangled by that cord.

That the head is downward all the time of gestation, seems, on the whole, to be the most reasonable opinion, though it be liable to the objection already mentioned, and seems contradictory to the observation of some authors, who alledge, that, in opening women that died in the fifth, sixth, or seventh month, they have found the child's head toward the fundus uteri. But as it lies as easy in one posture as in another till the birth, this dispute is of less consequence in the practice of midwifery. It may be useful to suggest, that the wrong posture of the child in the uterus may proceed from circumvolutions of the funis umbilicalis (see tab. xxix.); or when there is little or no water surrounding the child, it may move into a wrong position, and be confined there by the stricture of the uterus, (see tab. xxx. xxxi. xxxii. xxxiii.); or lastly, it may be the effect of a pendulous belly or narrow pelvis, when the head lies forward over the pubis. See collect. xiii. and tab. xii. xxvii. xxxiv.

## S E C T. II.

### O F T O U C H I N G.

**TOUCHING** is performed by introducing the fore finger lubricated with pomatum into the vagina, in order to feel the os internum and neck of the uterus; and sometimes into the rectum, to discover the stretching of the fundus. By some, we are advised to touch with the middle finger, as being the longest; and by others, to employ both that and the first; but the middle is too much encumbered by that on each side, to answer the purpose fully; and when two are introduced together, the patient never fails to complain. The design of touching, is, to be informed whether the woman is or is not with child; to know how far she is advanced in her pregnancy; if she is in danger of a miscarriage; if the os uteri be dilated; and, in time of labour, to form a right judgement of the case from the opening of the os internum, and the pressing down of the membranes with their waters; and lastly, to distinguish what part of the child is presented. It is generally impracticable to discover by a touch in the vagina, whether or not the uterus is impregnated, till after the fourth month; when the best time for examination is the morning, when the woman is fasting, after the contents of the bladder and rectum have been discharged; and she ought, if necessary, to submit to the enquiry in a standing posture; because, in that case, the uterus hangs lower down in the vagina, and the weight is more sensible to the touch than when she lies reclined. One principal reason of our uncertainty is, when we try to feel the neck, the womb rises up on our pressing against the vagina, at the side of the os internum (see tab. vi. fig. 1.); and in some, the vagina feels very tense; but, when the fundus uteri is advanced

near

near the navel, the pressure from above keeps down the os internum so much, that you can generally feel both the neck, and above that, the stretching of the under part of the uterus. See tab. vi. viii.

There is no considerable variation to be felt in the figure of the os internum, except in the latter end of pregnancy, when it sometimes grows larger and softer (see tab. ix.); nor do the lips seem to be more closed in a woman with child than in another, especially in the beginning of pregnancy; but in both cases, the os uteri is felt like the mouth of a young puppy or tench, as we have before observed. In some, the lips are very small; in others, large; and sometimes, though seldom, smoothed over or pointed. In many women, who have formerly had children and difficult labours, the lips are large, and so much separated as to admit the tip of an ordinary finger; but a little higher up, the neck seems to be quite closed.

In the first four months, the neck of the womb may be felt hanging down in the vagina, by pushing up the finger by the side of the os internum; but the stretching of the uterus and upper part of the neck cannot be perceived till the fifth, and sometimes the sixth month; and even then the uterus must be kept down, by a strong pressure upon the belly.

The stretching of the fundus is sometimes felt by the finger introduced into the rectum, before it can be perceived in the vagina; because, in this last method, the uterus recedes from the touch, and rises too high to be accurately distinguished; whereas the finger, being introduced into the rectum, passes along the back of the womb almost to the upper part of the fundus, which in an unimpregnated state is felt flat on the back part, and jutting out at the sides; but the impregnated uterus is perceived like a large round tumour.

About the fifth or sixth month, the upper part of the uterus is so much stretched, as to rise three or four inches above the os pubis, or to the middle space between that and the navel; so that, by pressing the hand on the belly, especially of lean women, it is frequently perceived (see tab. vii.); and if, at the same time, the index of the other hand be introduced in the vagina, the neck will seem shortened, particularly at the fore part and sides; and, as I have already observed, the weight will be sensibly felt; but if the parietes of the abdomen are stretched after eating, one may be deceived by the stretching of the stomach, because weight and pressure are the same. But all these signs are more perceptible toward the latter end of pregnancy; and in some women the os internum is felt a little open some weeks before the full time, though generally it is not opened till a few days before labour begins.

From the fifth to the ninth month, the neck of the uterus becomes shorter and shorter, and the stretching of the womb grows more and more perceptible. In the seventh month, the fundus rises as high as the navel; in the eighth month, to the middle space betwixt the navel and scrobiculus cordis; and in the ninth, even to the scrobiculus, except in pendulous bellies. See tab. vii, viii, ix. But all these marks may vary in different women; for when the belly is pendulous, the parts below the navel are much more stretched than those above; and hang over the os pubis; the fundus will then be only equal to, or a little higher than, the navel; at other times the uterus will rise in the latter end of the seventh or eighth month to the scrobiculus cordis. The neck of the womb will in some be felt as long in the eighth, as in others in the sixth or seventh month. This variation sometimes makes the examination of the abdomen more certain than the touch of the vagina; and so *vice versa*. At other times, we must judge by both. See collect. xiii. and tab. xii.

## S E C T. III.

## OF THE SIGNS OF CONCEPTION, AND THE EQUIVOCAL SIGNS OF PREGNANT AND OBSTRUCTED WOMEN.

THE signs of pregnancy are to be distinguished from those that belong to obstructions, by the touch in the vagina, and motion of the child in the fifth or sixth month: sometimes, by the touch in the rectum, before and after the fifth month, when the tumour of the abdomen is plainly perceived.

Most women, a day or two before the irruption of the catamenia, labour under complaints proceeding from a plethora; such as stretching pains in the back and loins, inside of the thighs, breast, and head; a sickness and oppression in the stomach, and a fulness of all the viscera of the abdomen; and all these symptoms abate, and gradually vanish, when the discharge begins and continues to flow. But if the woman be obstructed by any accident or error in the non-naturals, all those complaints continue and increase, and are hardly distinguishable from the symptoms of pregnancy, till the end of the fourth month; at which period, women with child grow better, and all complaints of fulness gradually wear off; whereas those who are only obstructed, grow worse and worse, from the increase of the lentor in the fluids, which will in time produce various and dangerous diseases. The fundus uteri, in the obstructed patient, is not stretched, nor is the disorder in her stomach so violent as in a pregnant woman, and seldom accompanied with retchings; while the woman with child is afflicted with a retching every morning, and subject to longings besides. The first labours under a fulness of the vessels; the last, over and above this complaint, suffers an additional one from the distension of the uterus by the impregnated ovum. Obstructions and pregnancy are both accompanied by a stretching fulness of the breasts; but in the last only may be perceived the areola, or brown ring, round the nipples, from which, in the last months, a thin serum distils; but this circle is not always so discernable as in the first pregnancy, and even then is uncertain, as well as the others.

About the fifth or sixth month, the circumscribed tumour, or stretching of the uterus, is felt above the os pubis; and by this circumscription and consistence, easily distinguished from the ascites or dropsy of the abdomen; it is also rounder and firmer than those swellings that accompany obstructions, which proceed from a general fulness of the vessels, belonging to the ligaments and neighbouring viscera.

On the whole, the difficulty of distinguishing between obstruction and pregnancy, in the first months, is so great, that we ought to be cautious in giving our opinion, and never prescribe such remedies as may endanger the fruit of the womb, but rather endeavour to palliate the complaints until time shall discover the nature of the case; and always judge on the charitable side, when life or reputation is at stake.

In the fifth or sixth month of uterine gestation, by the touch in the vagina, we perceive the neck of the womb considerably shortened; and the stretching of the lower part of the uterus is then sensibly felt between the mouth of the womb and the pubes, and on each side of the neck. See tab. vi. viii.

In the seventh month, the head of the child is frequently felt resting against the lower part of the uterus, between the pubes and os internum; and being pushed upward toward the fundus, sinks down again by its own gravity. All these diagnostics are more plain and certain, the nearer the patient approaches to the time of delivery.

Sometimes



Sometimes the head is not felt till the eighth or ninth month; and in some few cases, not till after the membranes are broke, when it is forced down by the contraction of the uterus and strong labour-pains. This circumstance may be owing to the head resting above the basin, especially in a narrow pelvis; or to the distension of its belly with air after death, by which, the fœtus being rendered specifically lighter than the surrounding waters, the body floats up to the fundus, if there is a large quantity of fluid in the membranes; nor is the body always felt when the child lies across the uterus. See collect. xiii.

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#### S E C T. IV.

HOW TO DISTINGUISH THE FALSE LABOUR FROM THE TRUE, AND THE MEANS TO BE USED ON THAT OCCASION.

**I**F the os uteri remains close shut, it may be taken for granted that the woman is not yet in labour, notwithstanding the pains she may suffer. With regard to these, an accurate enquiry is to be made; and if her complaints proceed from an over-stretching fulness of the uterus, or vessels belonging to the neighbouring parts, bleeding in the arm or ankle, to the quantity of six or eight ounces, ought to be prescribed, and repeated occasionally. If the pains are occasioned by a looseness, or diarrhœa, it must be immediately restrained with opiates, as in book ii. chap. iii. sect. 4. Colic pains are distinguished from those of labour by being chiefly confined to the belly, without going off and returning by distinct intervals; they are, for the most part, produced by fœces too long retained in the colon, or by such ingesta as occasion a rarefaction or expansion of air in the intestines, by which they are violently stretched and vellicated. This complaint must be removed by opening clysters, to empty the guts of their noxious contents; and this evacuation being performed, opiates may be administered to assuage the pains; either to be injected by the anus, taken by the mouth, or applied externally in the form of epithem or embrocation.

Sometimes the os internum may be a little dilated, and yet it may be difficult to judge whether or not the patient be in labour. The case, however, may be ascertained after some attendance by these considerations: if the woman is not arrived at her full time; if no soft or glary mucus hath been discharged from the vagina; if the pains are limited to the region of the belly, without extending to the back and inside of the thighs; if they are slight, and continue without intermission or increase; nay, if they have long intervals, and recur without force sufficient to push down the waters and membranes, or child's head, to open the os internum; if this part be felt thick and rigid, instead of being soft, thin, and yielding, we may safely pronounce that labour is not yet begun; and those alarms are to be removed as we have directed in the case of false or colic pains. Besides, if the pulse be quick and strong, and the patient attacked by stitches in the sides, back, or head, bleeding will be likewise necessary. See collect. xiii. and tab. viii. ix. x.

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#### S E C T. V.

THE DIVISION OF LABOURS.

**H**IPPOCRATES, and almost all the writers upon this subject from his time to the fifteenth century, divided labour into two kinds; namely, *natural* and *preternatural*. The first comprehended those cases in which the



head (others say the head and breech) presented, though the presentation of the head was always deemed the most natural; the other included all births in which any other part of the body first offered itself. And though they did not, like us, use a third distinction, they seem to have understood it in their practice; for, among their chirurgical operations, we always find a chapter on the method of delivering dead children, by opening the head, and extracting with the crotchet. At present, labours are divided into *natural*, according to the ancients, when the head or breech presents; *laborious*, when, notwithstanding this situation of the child, the delivery goes on so tediously, that the woman is in danger of losing her life, unless she is assisted with the operator's hand, fillet, forceps, blunt hook, or crotchet; and *preternatural*, when neither head nor breech presents, so that for the most part, there is a necessity of turning the child, and bringing it away by the feet. But the division of labours hath been varied according to the opinion of different people. Some think that all those cases ought to be deemed *preternatural*, in which any part of the body (the head itself not excepted) presents in an unusual way. Others affirm, that whatever part presents, or however the posture of the child may be, if it is delivered without any other assistance than that of the labour-pains, the birth ought to be called *natural*; *laborious*, when in these cases the child is born with difficulty; and *preternatural*, when, lying across the uterus, it must be turned and delivered by the feet.

For my own part, having in teaching found all these divisions liable to objections, I have followed a method which is more simple than the others, and will save abundance of repetition.

I call that a *natural* labour, in which the head presents, and the woman is delivered by her pains, and the assistance commonly given; but should the case be so tedious and lingering, that we are obliged to use extraordinary force in stretching the parts, extracting with the forceps, or (to save the mother's life) in opening the head and delivering with the crotchet, I distinguish it by the appellation of *laborious*; and in the *preternatural*, I comprehend all those cases in which the child is brought by the feet, or the body delivered before the head. Neither do I mind how the child presents, so much as the way in which it is delivered; for there are cases in which the head presents, and for several hours we expect the child will be delivered in the natural way; but, if the woman has not strength enough to force down the child's head into the pelvis, or in floodings we are at length obliged to turn and bring it by the feet, because it is so high that the forceps cannot be applied, and if the child is not large, nor the pelvis narrow, it were pity to destroy the hopes of the parents, by opening the skull, and extracting with the crotchet. In this case, therefore, although the child presents in a natural way, we are obliged to turn and deliver it in the same manner as if the shoulder, breast, or back, had presented; and generally, this operation is more difficult than in either of those cases; because if the waters are all discharged, and the uterus close contracted round the fœtus, it is more difficult to raise the head to the fundus. When the breech presents, we are frequently obliged to push it up and search for the legs; which being found, we proceed to deliver the body, and lastly the head. If the head is large, or the pelvis narrow, and the waters not discharged, we ought, if possible, to turn the child into the natural position.

For a farther illustration, and to inform young practitioners that difficult cases do not frequently occur; suppose, of three thousand women in  
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one town or village, one thousand shall be delivered in the space of one year, and in nine hundred and ninety of these births, the child shall be born without any other than common assistance; fifty children of this number shall offer with the forehead turned to one side at the lower part of the pelvis, where it will stop for some time; ten will come with the forehead toward the groin, or middle of the pubes; five shall present with the breech, two or three with the face, and one or two with the ear; yet all these shall be safely delivered, and the case be more or less lingering and laborious according to the size of the pelvis and the child, or strength of the woman. Of the remaining ten that make up the thousand, six shall present with the head differently turned, and two with the breech; and these cannot be saved without stretching the parts, using the forceps or crotchet, or pushing up the child in order to bring it by the feet; this necessity proceeding either from the weakness of the woman, the rigidity of the parts, a narrow pelvis, or a large child, &c.; the other two shall lie across, and neither head nor breech, but some other part of the body, present, so that the child must be turned and delivered by the feet. Next year, let us suppose another thousand women delivered in the same place; not above three, six, or eight, shall want extraordinary assistance; nay, sometimes, though seldom, when the child is young or unusually small, and the mother has strong pains and a large pelvis, it shall be delivered even in the very worst position, without any other help than that of the labour-pains.

As the head therefore presents right in nine hundred and twenty of a thousand labours, all such are to be accounted *natural*; those of the other seventy that require assistance may be deemed *laborious*; and the other ten, to be denominated *laborious* or *preternatural*, as they are delivered by the head or feet.

In order, therefore, to render this Treatise as distinct as possible, for the sake of the reader's memory, as well as of the dependence and connection of the different labours, they are divided in the following manner:

That is accounted *natural*, in which the head presents, and the woman is delivered without extraordinary help; those births are called *laborious* or *non-natural*, when the head comes along with difficulty, and must be assisted either with the hand in opening the parts, or with a fillet or forceps, or even when there is a necessity for opening and extracting it with the crotchet; and those which are brought by the breech or feet, are denominated *preternatural*, because the delivery is performed in a preternatural way.

## C H A P. II.

### *Natural Labours.*

#### S E C T. I.

##### OF THE DIFFERENT POSITIONS OF WOMEN IN LABOUR.

**I**N almost all countries, the woman is either to sit, walk about, or rest upon a bed, until the os uteri is pretty much dilated by the gravitation of the waters, or (when they are in small quantity) by the head of the fœtus, so that delivery is soon expected, when she is put in such position.

sition as is judged more safe, easy, and convenient for that purpose; but the patient may be put upon labour too prematurely, and bad consequences will attend such mistakes. See collect. xiii. xiv.

Among the Egyptians, Grecians, and Romans, the woman was placed upon a high stool; in Germany, and Holland, they use the chair which is described by Daventer and Heister; and for hot climates, the stool is perfectly well adapted; but in northern countries, and cold weather, such a position must endanger the patient's health.

In the West-Indies, and some parts of Britain, the woman is seated on a stool made in form of a semicircle; in other places, she is situated on a woman's lap; and some, kneeling on a large cushion, are delivered backwards.

In France, the position is chiefly that of half-sitting half-lying, on the side or end of a bed; or the woman being on naked bed, is raised up with pillows or a bed-chair.

The London method is very convenient in natural and easy labours; the patient lies on bed upon one side, the knees being contracted to the belly, and a pillow put between them to keep them asunder. But the most commodious method is to prepare a bed and a couch in the same room; a piece of oiled cloth or dressed sheep-skin is laid across the middle of each, over the under-sheet; and above this are spread several folds of linen pinned or tied with tape to each side of the bed and couch. These are designed to sponge up the moisture in time of labour and after delivery; while the oiled cloth or sheep-skins below preserve the feather-bed from being wetted or spoiled; for this purpose, some people lay besides upon the bed several under-sheets over one another, so that by sliding out the uppermost every day, they can keep the bed dry and comfortable.

The couch must be no more than three feet wide, and provided with castors; and the woman, without any other dress than that of a short or half-shift, a linen skirt or petticoat open before, and a bed-gown, ought to lie down upon it, and be covered with clothes according to the season of the year. She is commonly laid on the left side, but in this particular she is to consult her own ease; and a large sheet being doubled four times or more, one end must be slipped in below her breech, while the other hangs over the side of the couch, to be spread on the knee of the accoucheur or midwife, who sits behind her on a low seat. As soon as she is delivered, this sheet must be removed, a soft warm cloth applied to the os externum, and the pillow taken from betwixt her knees; she then must be shifted with a clean warm half-shift, linen skirt and bed-gown, and the belly kept firm with the broad head-band of the skirt, the ends of which are to be pinned across each other. These measures being taken, the couch must be run close to the bed-side, and gently moved from one to another; but if there is no couch, the bed must be furnished with the same apparatus. Some, again, are laid across the foot of the bed, to the head of which the clothes are previously turned up till after delivery, when the woman's posture is adapted, and then they are rolled down again to cover and keep her warm. By this expedient the place of a couch is supplied, and the upper part of the bed preserved soft and clean; whereas those who are laid above the clothes, must be taken up and shifted while the bed is put to rights, in which case they are subject to fainting; and to such as are very much enfeebled, this fatigue is often fatal.



Women are most easily touched, least fatigued, and kept warmest, when they lie on one side. But if the labour should prove tedious, the Parisian method seems most eligible; because, when the patient half-sits half-lies, the brim of the pelvis is horizontal; a perpendicular line falling from the middle space between the scrobiculus cordis and navel, would pass exactly through the middle of the basin, as observed in book i. chap. i. In this position, therefore, the weight of the waters, and, after the membranes are broke, that of the child's head, will gravitate downward, and assist in opening the parts, while the contracting force of the abdominal muscles and uterus is more free, strong, and equal, in this than in any other attitude. Wherefore, in all natural cases, when the labour is lingering or tedious, this or any other position, such as standing or kneeling, ought to be tried, which, by an additional force, may help to push along the head and alter its direction, when it does not advance in the right way. Nevertheless, the patient must by no means be too much fatigued.

When the woman lies on the left side, the right hand must be used in touching, and *vice versa*, unless she is laid across on the bed; in which case, either hand will equally answer the same purpose; but if she lies athwart, with the breech toward the bed's foot, it will be most convenient to touch with the left hand when she is upon the left side, and with the right when in the opposite position. And here it will not be amiss to observe, that in the description of all the laborious and preternatural deliveries treated of in this performance, the reader must suppose the woman lying on her back, as directed in chap. iii. sect. 3. and chap. iv. sect. 4. except when another posture is described; and that in natural and laborious labours, whether she be upon her side or back, the head and shoulders are a little raised into a reclining posture, so that she may breathe easily, and assist the pains.

But in preternatural labours, when there is a necessity for using great force in turning the child, the head and shoulders must lie lower than the breech, which, being close to the side or foot of the bed, ought to be raised higher than either; because, when the pelvis is in this situation, the hand and arm are easily pushed up in a right-line along the back part of the uterus, even to its fundus. Sometimes, however, when the feet of the child are toward the belly of the mother, they are more easily felt and managed when she lies on her side. At other times, placing the woman on her knees and elbows on a low couch, according to Daventer's method, will succeed better by diminishing in part the strong resistance from the pressure and weight of the uterus and child, by which the feet will sometimes be easier found and delivered; but then it is safer to the child and easier for the operator and mother, to turn her to her back before you deliver the body and head.

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### S E C T. II.

#### OF THE MANAGEMENT OF WOMEN IN A NATURAL LABOUR.

IN a woman come to full time, labour commonly begins and proceeds in the following manner:

The os uteri is felt soft and a little opened, the circumference being sometimes thick, but chiefly thin; from this aperture is discharged a thick mucus, which lubricates the parts, and prepares them for stretching. This discharge usually begins some days before, and is accounted the fore-runner of real labour; at the same time the woman is seized at intervals with slight pains,



pains, that gradually stretch the os uteri, fitting it for dilatation, and when labour actually begins, the pains become more frequent, strong, and lasting.

At every pain the uterus is strongly compressed by the same effort which expels the contents of the rectum at stool; namely, the inflation of the lungs and the contraction of the abdominal muscles.

If the child be surrounded with a large quantity of waters (see tab. ix. x. xi.) the uterus cannot come in contact with the body of it; but at every pain the membranes that are pushed down by the fluids they contain, and the mouth of the womb being sufficiently opened by this gradual and repeated distension, they are forced into the middle of the vagina; then the uterus contracts and comes in contact with the body of the child, and, if it be small, the head is propelled with the waters. Here the membranes usually break; but if that is not the case, they are pushed along toward the os externum, which they also gradually open, and appear on the outside in the form of a large round bag; mean-while, the head advances, and the os externum being by this time fully dilated, is also protruded; when, if the membranes, instead of bursting in the middle of the protuberance, are torn all round at the os externum, the child's head is covered with some part of them, which goes under the name of the *caul* or *king's hood*. If the placenta is at the same time separated from the uterus, and the membranes remain unbroken, the secundines, waters, and child, are delivered together; but if the placenta adheres, they must of course give way; and should they be torn all round from the placenta, the greatest part of the body, as well as the head of the child, will be enveloped by them, from which it must be immediately disengaged, that the air may have a free passage into the lungs.

When the head is large, so that it does not descend immediately into the pelvis, the membranes are forced down by themselves, and being stretched thinner and thinner give way, when all the waters, which are farther advanced than the head, run out; then, the uterus coming in contact with the body of the child, the head is squeezed down into the mouth of the womb, which it plugs up so as to detain the rest of the waters. See tab. xii. xiii.

Sometimes when the quantity of waters is very small, and the uterus embraces the body of the child, the head, covered with the membranes, is forced downward, and gradually opens the os internum; but at its arrival in the middle of the pelvis and vagina, part of the waters will be pushed down before it, sometimes in a large and sometimes in a small proportion, toward the back part of the pelvis. At other times, when the waters are in small quantity, no part of them are to be distinguished farther than the head, which descending lower and lower, the attenuated membranes are split upon it; while at the same time it fills up the mouth of the womb and upper part of the vagina in such a manner, as hinders the few remaining waters from being discharged at once; though in every pain a small quantity distils on each side of the head, for lubricating the parts, so as that the child may slip along the more easily. See tab. xiii.

The uterus contracts; the pains become quicker and stronger; the crown of the head is pushed down to the lower part of the pelvis, against one of the ischia, at its lower extremity; the forehead, being at the upper part of the opposite ischium, is forced into the hollow of the under part of the sacrum, while the vertex and hind-head are pressed below the os pubis (see tab. xiv.) from whence it rises in a quarter-turn, gradually opening the os externum; the frænum labiorum, or fourchette, perinæum, fundament,

and

and the parts that intervene betwixt that and the extremity of the sacrum, are all stretched outward in form of a large tumour. The perinæum, which is commonly but one inch from the os externum to the anus, is now stretched to three; the anus to two; and the parts between that and the coccyx are stretched from two inches to about three or more. The broad sacro-sciatic ligaments, reaching from each side of the lower part of the sacrum, to the under part of each ischium, are also outwardly extended, and the coccyx is forced backward; while the crown of the head, where the lambdoidal crosses the end of the sagittal suture, continues to be pushed along, and dilates the os externum more and more: See tab. xv. xviii.

When the head is so far advanced that the back part of the neck is come below the under part of the os pubis, the forehead forces the coccyx, fundament, and perinæum, backward and downward; then the hind-head rises about two or three inches from under the pubes; making a half-round turn in its ascent, by which the forehead is equally raised from the parts upon which it pressed, and the perinæum escapes without being split or torn, (see tab. xix.); at the same time, the shoulders advance into the sides of the pelvis at its brim where it is widest, and, with the body, are forced along and delivered; mean-while, by the contraction of the uterus, the placenta and chorion are loosened from the inner surface to which they adhered, and forced through the vagina, out at the os externum.

When the head rests at first above the brim of the pelvis, and is not far advanced, the fontanel may be plainly felt with the finger, commonly toward the side of the pelvis; this is the place where the coronal crosses the sagittal suture, and the bones are a little separated from each other, yielding a softness to the touch, by which may be distinguished four sutures, or rather one crossing another. These may be plainly perceived; even before the membranes are broke; yet the examination must not be made during a pain, when the membranes are stretched down and filled with waters; but only when the pain begins to remit, and the membranes to be relaxed; otherwise they may be broke too soon, before the os internum be sufficiently dilated, and the head properly advanced.

When the vertex is come lower down, the sagittal suture only is to be felt; because, as the hind-head descends in the pelvis, the fontanel is turned more backward to the side, or toward the concavity of the sacrum; but, after it has arrived below the under part of the ossa pubis, the lambdoidal may be felt crossing the end of the sagittal suture, the occiput making a more obtuse angle than that of the parietal bones, at the place where the three are joined together. But all these circumstances are more easily distinguished after the membranes are broke; or when the head is so compressed that the bones ride over one another, provided the hairy scalp be not excessively swelled. See collect. xiv. and tab. xiii, xiv, xvi, xvii, xviii.

### S E C T. III. N U M B. I.

#### HOW AND WHEN TO BREAK THE MEMBRANES.

I HAVE already observed, that if the child be surrounded with a large quantity of waters, the uterus cannot come in contact with the body, so as to press down the head, until the membranes are pushed a considerable way before it into the vagina; nor even then, until they are broke; and the fluid diminished in such a manner as will allow the womb to contract, and with the assistance of the pains, force along the child. When the mem-

branes;

branes, therefore, are strong or unadvanced, and continue so long unbroke that the delivery is retarded, provided the os internum be sufficiently dilated, they ought to be broke without farther delay, especially if the woman hath been much fatigued or exhausted with labour, or is seized with a violent flooding; in which case, the rupture of the membranes hasten delivery, and the hæmorrhage is diminished by the contraction of the uterus, which lessens the mouth of the vessels that are also compressed by the body of the child.

The common method of breaking the membranes, is by thrusting the fingers against them when they are protruded with the waters during the pain, or by pinching them with the finger and thumb; but if they are detained too high to be managed in either of these methods, the hand may be introduced into the vagina, if the os externum is so lax as to admit it easily; and if this cannot be done without giving much pain, the fore and middle fingers being pushed into the vagina with the other hand, let a probe, or pair of pointed scissars be directed along and between them, and thrust through the membranes when they are pushed with the waters below the head. This operation must be cautiously performed, lest the head should be wounded in the attempt; and as for the membranes, let the opening be ever so small, the waters are discharged with force sufficient to tear them asunder.

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#### N U M B. II.

##### WHEN LITTLE OR NO WATERS ARE PROTRUDED.

**I**F the vertex, instead of resting at the side of the brim of the pelvis, or at the os pubis, is forced farther down to the os internum, and the waters happen to be in small quantity, the head is pushed forward, and gradually opens the mouth of the womb without any sensible interposition of the waters; then it advances by degrees into the vagina, and the membranes being split or torn, little or nothing is discharged until the body of the child be delivered; and in this case, the hair of the head being felt, will sufficiently indicate that the membranes are broke. If no hair is to be felt, but a smooth body presents itself to the touch, and the woman has undergone many strong pains even after the mouth of the womb hath been largely dilated, and the head forced into the middle of the pelvis, you may conclude that delivery is retarded by the rigidity of the membranes, that there is but a small quantity of waters, and that if the contained sacs were broke, the head would come along without farther hesitation.

Sometimes no waters can be felt while the head is no farther advanced than the upper part of the pelvis, because it plugs up the passage and keeps them from descending; but as it advances downward, the uterus contracts, and they are forced down in a small quantity toward the back part, from thence, as the head descends, or even though it should stick in that situation, they are pushed farther down, and the membranes may be easily broke; but the task is more difficult when no waters come down, and the membranes are contiguous to the head. In this case, they must be scratched a little, during every pain, with the nail of a finger, which, though short and smooth, will by degrees wear them thinner and thinner, until they split upon the head by the force of labour. Yet this expedient ought never to be used until you are certain that delivery is retarded by their rigidity; for if that be not the hindrance, the difficulty must proceed from the weakness of the woman, a large head, or narrow pelvis; in which case, the delivery is a work of time, and will be obstructed by the premature discharge of the waters



waters, which by gradually passing by the head, ought to keep the parts moist and slippery, in order to facilitate the birth; for, when the membranes are not broke, until the head is forced into the middle of the pelvis, the largest part of it being then past the upper part of the sacrum, is commonly squeezed along, opens the os externum, and is delivered before all the waters are discharged from the uterus; so that what remains, by moistening and lubricating the parts, helps the shoulders and body to pass with more ease. When the membranes are too soon broke, the under part of the uterus contracts sometimes so strongly before the shoulders, that it makes the resistance still greater, See collect. xv.

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### N U M B. III.

#### HOW TO MANAGE WHEN THE HEAD COMES DOWN INTO THE PELVIS.

**I**N most natural labours, the space betwixt the fore and back fontanels, viz. the vertex, presents to the os internum, and the forehead is turned to the side of the pelvis; because the basion at the brim is widest from side to side; and frequently, before the head is pushed in and fast wedged among the bones, the child (after a pain) is felt to move and turn it to that side or situation in which it is least pressed and hurt, if it was not presenting in that position before. But this position of the head may alter, viz. in those where it is as wide, or wider, from the back part to the fore part of the brim, than from side to side, the forehead may be turned backward or forward. But this form of the pelvis seldom happens.

This posture is always observed in a narrow pelvis, when the upper part of the sacrum juts forward to the pubes; but as the child is forced lower down, the forehead turns into the hollow at the interior part of the sacrum, because the vertex and occiput find less resistance at the lower part of the ossa pubis than at the ischium, to which it was before turned, the pelvis being at the pubes, as formerly described, no more than two inches in depth, whereas at the ischium it amounts to four. If, therefore, the forehead sticks in its former situation, without turning into the hollow, it may be assisted by introducing some fingers or the whole hand, into the vagina, during a pain, and moving it in the right position. See chap. iv. sect. iv. No. 5.

When the head of the fœtus presents and is forced along in any of those positions, the labour is accounted natural, and little else is to be done, but to encourage the woman to bear down with all her strength in every pain, and to rest quietly during each interval; if the parts are rigid, dry, or inflamed, they ought to be lubricated with pomatum, hogs-lard, butter, or ung. althææ; the two first are most proper for the external parts, and the two last (as being harder and not so easily melted) ought to be put up into the vagina to lubricate that and the os internum.

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### N U M B. IV.

#### HOW TO ASSIST IN LINGERING LABOURS WHEN THE PARTS ARE RIGID.

**T**HE mouth of the womb and os externum, for the most part, open with greater difficulty in the first than in the succeeding labours, more especially in women turned of thirty. In these cases, the os externum must be gradually dilated in every pain, by introducing the fingers in form of a cone, and turning them round, so as to stretch the parts by gentle degrees; and



and the whole hand being admitted into the vagina, it will be sometimes found necessary to insinuate the fingers with the flat of the hand between the head and os internum; for when this precaution is not taken in time, the os uteri is frequently pushed before the head (especially that part of it next the pubes) even through the os externum; or if the head passes the mouth of the womb, it will protrude the parts of the os externum, and will endanger a laceration in the perinæum. This dilatation, however, ought to be cautiously performed, and never attempted except when it is absolutely necessary; even then it must be effected slowly, and in time of a pain, when the woman is least sensible of the dilating force.

When the labour happens to be lingering, though every thing be in a right posture, if the assistants are clamorous, and the woman herself too anxious and impatient to wait the requisite time without complaining, the labour will be actually retarded by her uneasiness, which we must endeavour to surmount by arguments and gentle persuasion; but if she is not to be satisfied, and strongly impressed with an opinion that certain medicines might be administered to hasten delivery, it will be convenient to prescribe some medicine that she may take between whiles, to beguile the time and please her imagination; but if she is actually weak and exhausted, it will be necessary to order something that will quicken the circulating fluids, such as preparations of amber, castor, myrrh, volatile spirits, the pulv. ad partum of the Edinburgh Pharmacopœia, with every thing in point of diet and drink that nourishes and strengthens the body. If the patient is of a plethoric habit, with a quick, strong pulse, the contrary method is to be used, such as venesection, antiphlogistic medicines, and plentiful draughts of weak diluting fluids. See collect. xvii. xviii.

### N U M B. V.

#### HOW TO BEHAVE WHEN THE BIRTH IS OBSTRUCTED BY THE NAVEL-STRING OF THE CHILD, OR A NARROW PELVIS.

See book ii. chap. ii. sect. iii.

**ALTHOUGH** the head is pushed down into the pelvis and the vertex employed in opening the os externum, the forehead being lodged in the concavity formed by the coccyx and lower part of the sacrum; yet frequently, after the labour-pain is abated, the head is again withdrawn, by the navel-string happening to be twisted round the neck; or when the shoulders, instead of advancing, are retarded at the brim of the pelvis, one resting over the ossa pubis, while the other is fixed at the sacrum; or when (the waters having been long evacuated) the under part of the uterus contracts round the neck and before the shoulders, keeping up the body of the child.

When the head is therefore drawn back by any of these obstacles, and the delivery hath been retarded during several pains, one or two fingers being introduced into the rectum before the pain goes off, ought to press upon the forehead of the child at the root of the nose, great care being taken to avoid the eyes; this pressure detains the head till the return of another pain, which will squeeze it farther down, while the fingers, pushing slowly and gradually, turn the forehead half round outward and half round upward. By this assistance, and the help of strong pains, the child will be forced along, although the neck be entangled in the navel-string; for as the child advances the uterus contracts, and consequently the placenta is moved lower; the funis umbilicalis will also stretch a little, without obstructing the circulation.

The head being thus kept down, the shoulders are pressed in every succeeding pain until they are forced into the pelvis, when the whole comes along, without farther difficulty. And this expedient will, moreover, answer the purpose, when the under part of the uterus or the os internum is contracted round the neck of the child, and before the shoulders; also, when the head is very low, pressing a finger on each side of the coccyx externally, will frequently assist in the same manner; also, in lingering cases, when the woman is weak, the head large, or the pelvis narrow, you may assist the delivery by gently stretching both the os externum and internum with your fingers, in time of the pains, which will increase the same, as well as dilate; but this is only to be done when absolutely necessary, with caution and at intervals, for fear of inflaming or lacerating the parts.

Over and above these obstacles, the head may be actually delivered, and the body retained by the contraction of the os externum round the neck, even after the face appears externally. In this case it was generally alledged that the neck was close embraced by the os internum; but this seldom happens when the head is delivered, because then the os internum is kept dilated on the back part and sides by the breast and arms of the fœtus, unless it be forced low down with or before the head.

When the head is delivered, and the rest of the body retained from the largeness or wrong presenting of the shoulders, or by the navel-string being twisted round the body or neck of the child, the head must be grasped on each side, the thumbs being applied to the occiput, the fore and middle fingers extended along each side of the neck, while the third and fourth of each hand support each side of the upper jaw; thus embraced, the head must be pulled straight forwards; and if it will not move easily along, the force must be increased, and the direction varied from side to side, or rather from shoulder to shoulder, not by sudden jerks, but with a slow, firm, and equal motion. If the body cannot be moved in this manner, though you have exerted as much force as possible without running the risk of overstraining the neck, you must endeavour to slip the turns of the navel-string over the head. But should this be found impracticable, you ought not to trifle in tying the string at two places, and cutting betwixt the ligatures, as some people have advised; such an operation would engross too much time; besides, the child is in no danger of suffocation from the stricture of the funis, because it seldom or never breathes before the breast is delivered.

The better method is, immediately to slide along one or two fingers, either above or below, to one of the arm-pits, by which you try to bring along the body, while with the other hand you pull the neck at the same time; if it still continues unmoved, shift hands, and let the other arm-pit sustain the force; but if this fail, cut the navel-string, and tie it afterwards. If the shoulders lie so high that the fingers cannot reach far enough to cut or take sufficient hold, let the flat of the hand be run along the back of the child; or should the os externum be strongly contracted round the neck, push up your hand along the breast, and pull as before; and should this method fail, you must have recourse to the blunt-hook introduced and fixed in the arm-pit; but this expedient must be used with caution, lest the child should be injured or the parts lacerated.

The child being born, the funis umbilicalis must be divided, and the placenta delivered, according to the directions that will occur in the sequel. See collect. xix, xx, xxi, xxii.

## S E C T. IV. N U M B. I.

## HOW TO MANAGE THE CHILD AFTER DELIVERY.

**T**HE child being delivered, ought to be kept warm beneath the bed-clothes, or immediately covered with a warmed flannel or linen cloth; if it cries and breathes, the umbilical cord may be tied and cut, and the child delivered to the nurse without delay; but if the air does not immediately rush into the lungs, and the circulation continues between it and the placenta, the operation of tying and cutting must be delayed, and every thing tried to stimulate, and sometimes to give pain. If the circulation is languid, respiration begins with difficulty, and proceeds with long intervals; and if it be entirely stopped in the funis, the child, if alive, is not easily recovered; sometimes a great many minutes are elapsed before it begins to breathe. Whatever augments the circulating force, promotes respiration; and as this increases, the circulation grows stronger, so that they mutually assist each other. In order to promote the one and the other, the child is kept warm, moved, shaken, whipped; the head, temples, and breast rubbed with spirits; garlic, onion, or mustard, applied to the mouth and nose; and the child has been sometimes recovered by blowing into the mouth with a silver canula, so as to expand the lungs.

When the placenta is itself delivered, immediately or soon after the child, by the continuance of the labour-pains, or hath been extracted by the operator, that the uterus may contract so as to restrain too great a flooding; in this case, if the child has not yet breathed, and a pulsation is felt in the vessels, some people (with good reason) order the placenta, and as much as possible of the navel-string, to be thrown into a basin of warm wine or water, in order to promote the circulation between them and the child; others advise us to lay the placenta on the child's belly, covered with a warm cloth; and a third set order it to be thrown upon hot ashes; but of these the warm water seems the most innocent and effectual expedient. Nevertheless, if the placenta is still retained in the uterus, and no dangerous flooding ensues, it cannot be in a place of more equal warmth while the operator endeavours, by the methods above described, to bring the child to life. See collect. xxiii.

## N U M B. II.

**I**N lingering labours, when the head of the child hath been long lodged in the pelvis, so that the bones ride over one another, and the shape is preternaturally lengthened, the brain is frequently so much compressed; that violent convulsions ensue before or soon after the delivery, to the danger and often times the destruction of the child. This disorder is frequently relieved and carried off, and the bad consequences of the long compression prevented, by cutting the navel-string before the ligature is made, or tying it so slightly as to allow two, three, or four large spoonfuls to be discharged.

If the child has been dead one or two days before delivery, the lips and genitals (especially the scrotum in boys) are of a lived hue. If it hath lain dead in the uterus two or three days longer, the skin may be easily stripped from every part of the body, and the navel-string appears of the same colour with the lips and genitals; if ten or fourteen days, the body is much more livid and mortified, and the hairy scalp may be separated with ease; and indeed, any part of the child which hath been strongly pressed into the  
pelvis



pelvis, and retained in that situation for any length of time, will adopt the same mortified appearance.

### N U M B. III.

#### HOW TO TIE THE FUNIS UMBILICALIS.

**D**IFFERENT practitioners have used different methods of performing this operation; some proposing to tie and separate the funis before the placenta is delivered; to apply one ligature close to the belly of the child, with a view to prevent a rupture of the navel; and making another two inches above the former, to divide the rope between the two tyings; by the second ligature they mean to prevent a dangerous hæmorrhage from the woman, provided the placenta adheres to the uterus. But all these precautions are founded upon mistaken notions; and the following seems to be that which is easiest and best:

If the placenta is not immediately delivered by the pains, and no flooding obliges you to hasten the extraction, the woman may be allowed to rest a little and the child to recover. If the child does not breathe, or the respiration is weak, let the methods above prescribed be put in practice, with a view to stimulate the circulation; but if the child is lively, and cries with vigour, the funis may be immediately tied in this manner: having provided a ligature or two composed of sundry threads waxed together, so as to equal the diameter of a packthread, being seven inches in length and knotted at each end, tie the navel-string about two fingers breadth from the belly of the child, by making at first one turn if the funis be small, securing it with two knots; but if the cord be thick, make two more turns, and another double knot; then cut the funis with a pair of sharp scissars one finger's breadth from the ligature toward the placenta; and in cutting run the scissars as near as possible to the root of the blades, else the funis will be apt to slip from the edge, and you will be obliged to make several snips before you can effect a separation; at the same time, guard the point of the scissars with your other hand. The child being washed, a linen rag is wrapped round the tied funis; which being doubled up along the belly a square compress is laid over it, and kept firm or moderately tight with what the nurses call a *belly-band*, or *roller*, round the body.

This portion of the funis soon shrinks, turns first livid, then black, and about the fifth day falls off close to the belly; and let the navel-string be tied in any part, or any distance whatsoever from the belly, it will always drop off at the same place; so that ruptures in the navel seldom or never depend upon the tying of the funis, but may happen when the compress and belly-band are not kept sufficiently firm and continued some time after the separation of the withered portion, especially in those children that cry much; the bandage ought always to be applied so slight as not to affect respiration.

The ligature upon the funis must always be drawn so tight as to shut up the mouths of the vessels; therefore, if they continue to pour out their contents, another ligature must be applied below the former; for if this precaution be neglected, the child will soon bleed to death; yet if the navel-string is cut or torn asunder at two or three hand-breadths from the belly, and exposed to the cold without any ligature, the arteries will contract themselves, so as that little or no blood shall be lost; nay, sometimes, if the funis hath been tied and cut at the distance of three finger-breadths from the child's belly, so that it hath been kept from bleeding for an hour



or two, although the ligature be then untied, and the navel-string and belly chafed, and soaked in warm water, no more blood will be discharged. See collect. xxv.

### S E C T. V.

#### OF DELIVERING THE PLACENTA.

THE funis being separated and the child committed to the nurse; the next care is to deliver the placenta and membranes, if they are not forced down by the labour-pains. We have already observed, that if there is no danger from a flooding, the woman may be allowed to rest a little, in order to recover from the fatigue she has undergone; and that the uterus may in contracting have no time to squeeze and separate the placenta from its inner surface; during which pause also, about one, two, or three cups-full of blood are discharged through the funis from the vessels of the placenta, which is thus diminished in bulk, so that the womb may be more contracted; and this is the reason for applying one ligature only upon the cord. In order to deliver the placenta, take hold of the navel-string with the left hand, turning it round the fore and middle fingers, or wrapping it in a cloth, that it may not slip from your grasp; then pull gently from side to side, and desire the woman to assist your endeavour by straining as if she were at stool, blowing forcibly into her hand, or provoking herself to retch by thrusting her finger into her throat. If by these methods the placenta cannot be brought away, introduce your hand slowly into the vagina, and feel for the edge of the cake, which when you have found pull it gradually along; as it comes out at the os externum, take hold of it with both hands and deliver it, bringing away at the same time all the membranes, which, if they adhere, must be pulled along with leisure and caution.

When the funis takes its origin toward the edge of the placenta, which is frequently the case, the cake comes easier off by pulling than when the navel-string is inserted in the middle, unless it be uncommonly retained by its adhesion to the womb, or by the strong contraction of the os internum. If the funis is attached to the middle of the placenta, and that part presents to the os internum or externum, the whole mass will be too bulky to come along in that position; in this case you must introduce two fingers within the os externum, and bring it down with its edge foremost.

When the placenta is separated by the contraction of the uterus, in consequence of its weight and bulk it is pushed down before the membranes, and both are brought away inverted.

When part of the placenta has passed the os internum, and the rest of it cannot be brought along by easy pulling, because the os uteri is close contracted round the middle of it, or part of it still adheres to the womb, slide the flat of your hand below the placenta through the os internum; and having dilated the uterus, slip down your hand to the edge of the cake and bring it along; but if it adheres to the uterus, push up your hand again, and having separated it cautiously, deliver it as before.

If instead of finding the edge or middle of the placenta presenting to the os externum or internum, you feel the mouth of the womb closely contracted, you must take hold of the navel-string as above directed, and slide your other hand along the funis into the vagina; then slowly push your fingers and thumb, joined in form of a cone, through the os uteri, along the same cord, to the place of its insertion in the placenta; here let your hand

rest,

rest, and feel with your fingers to what part of the uterus the cake adheres; if it be loose at the lower edge, try to bring it along; but if it adheres, begin and separate it slowly, the back of your hand being turned to the uterus, and the fore part of your fingers towards the placenta; and for this operation the nails ought to be cut short and smooth.

In separating, press the ends of your fingers more against the placenta than the uterus; and if you cannot distinguish which is which, because they both feel equally soft (though the uterus is firmer than the placenta, and this last more solid than coagulated blood) I say, in this case, slide down your fingers to its edge, and conduct them by the separated part, pressing it gently from the uterus, until the whole is disengaged. Sometimes, when part of it is separated, the rest will loosen and come along, if you pull gently at the detached portion; but if this is not effected with ease, let the whole of it be separated in the most cautious manner; sometimes also, by grasping the inside of the placenta with your hand, the whole will be loosened without farther trouble. As the placenta comes along, slide down your hand and take hold of the lower edge, by which it must be extracted, because it is too bulky to be brought away altogether in a heap; and let it be delivered as whole as possible, keeping your thumb or fingers fixed upon the navel-string, by which means laceration is often prevented.

When the woman lies on her back, and the placenta adheres to the left side of the uterus, it will be most commodious to separate the cake with the right hand; whereas the left hand is most conveniently used when the placenta adheres to the right side of the womb; but when it is attached to the fore part, back, or fundus, either hand will answer the purpose.

That part of the uterus to which the placenta adheres, is kept still distended, while all the rest of it is contracted.

The nearer the adhesion is to the os internum, the easier is the placenta separated, and *vice versa*; because it is difficult to reach up to the fundus, on account of the contraction of the os internum and lower part of the womb, which are not stretched again without great force, after they have been contracted for any length of time.

When therefore the placenta adheres to the fundus, and all the lower part of the womb is strongly contracted, the hand must be forced up in form of a cone into the vagina, and then gradually dilate the os internum and inferior part of the uterus. If great force is required, exert it slowly, resting between whiles that the hand may not be cramped, nor the vagina in danger of being torn from the womb; for in this case the vagina will lengthen considerably upward.

While you are thus employed, let an assistant press with both hands on the woman's belly, or while you push with one hand, press with the other in order to keep down the uterus, else it will rise high up, and roll about like a large ball, below the lax parietes of the abdomen, so as to hinder you from effecting the necessary dilatation.

When you have overcome this contraction, and introduced your hand into the fundus, separate and bring the placenta along; as above directed; and should the uterus be contracted in the middle like an hour-glass, a circumstance that sometimes, though rarely, happens, the same method must be practised.

In every case, and especially when the placenta hath been delivered with difficulty, introduce your hand after its extraction, in order to examine if any part of the uterus be pulled down and inverted; and if that be the case,

push it up and reduce it without loss of time; then clear it of the coagulated blood, which otherwise may occasion violent after-pains.

For the most part, in ten, fifteen, or twenty minutes, more or less, the placenta will come away of itself; and though some portion of it, or of the membranes, be left in the uterus, provided no great flooding ensues, it is commonly discharged in a day or two, without any detriment to the woman; but at any rate, if possible, all the secundines ought to be extracted at once, and before you leave your patient, in order to avoid reflections.

I find that, both amongst the ancients and moderns, there have been different opinions and directions about delivering the placenta; some alledging, that it should be delivered slowly, or left to come of itself; others, that the hand should be immediately introduced into the uterus, to separate and bring it away. Before we run into extremes on either side, it should be considered how nature of herself acts in these cases. We find, in the common course of labours, that not once in fifty or an hundred times there is any thing more to be done than to receive the child. Some of the ancients have alledged, that no danger happens, on this account, oftener than once in one thousand labours; and as nature is for the most part sufficient of itself in such cases, it is very rare, perhaps not once in twenty or thirty times; that I have occasion to separate, as it generally comes down by the common assistance of pulling gently at the funis, and the efforts of the woman. I also find, that the mouth of the womb is as easily dilated some hours after delivery, as at any other time; so, in my opinion, we ought to go in the middle way, never to assist but when we find it necessary; on the one hand, not to torture nature when it is self-sufficient; nor delay it too long, because it is possible that the placenta may sometimes, though seldom, be retained several days; for if the uterus should be inflamed from any accident, and the woman be lost, the operator will be blamed for leaving the after-birth behind. See collect. xxiii.

## C H A P. II.

### *Of Laborious Labours.*

#### S E C T. I.

##### HOW LABORIOUS LABOURS ARE OCCASIONED.

IN the foregoing sheets, which treat of natural labours, I have described the most easy and simple method of managing the woman, delivering the child, and extracting the placenta; but, as it sometimes happens, that we must use extraordinary assistance for the preservation of the woman or child, or both, I must proceed to give directions how to behave in the laborious births, which more frequently occur than the preternatural.

A general outcry hath been raised against gentlemen of the profession, as if they delighted in using instruments and violent methods in the course of their practice; and this clamour hath proceeded from the ignorance of such as do not know that instruments are sometimes absolutely necessary, or from the interested views of some low, obscure, and illiterate practitioners, both male and female, who think they find their account in decrying the practice of their neighbours. It is not to be denied, that mischief has been done by instruments in the hands of the unskilful and unwary; but I am persuaded that every judicious practitioner will do every thing for the safety of



of patients before it has recourse to any violent method either with the hand or instrument, though cases will occur in which gentle methods will absolutely fail. It is therefore necessary to explain those reinforcements which must be used in dangerous labours; though they ought by no means to be called in, except when the life of the mother or child, or both, is evidently at stake; and even then managed with the utmost caution. For my own part, I have always avoided them as far as I thought consistent with the safety of my patients, and strongly inculcated the same maxim upon those who have submitted to my instructions.

All those cases in which the head of the child presents, and cannot be delivered in the natural way described in chap. ii. sect. ii. of this book, are accounted more or less laborious, according to the different circumstances from which the difficulty arises; and these commonly are, first, great weakness, proceeding from the loss of appetite and bad digestion; frequent vomitings, diarrhoeas or dysenteries, floodings, or any other disease that may exhaust the patient; as also the fatigue she may have undergone by unskilful treatment in the beginning of labour.

Secondly, from excessive grief and anxiety of mind, occasioned by the unseasonable news of sudden misfortune in time of labour, which often affects her so as to carry off the pains, and endanger her sinking under the shock.

Thirdly, from the rigidity of the os uteri, vagina, and external parts, which commonly happen to women in the first birth, especially to those who are about the age of forty; though it may be also owing to large callosities, produced from laceration or ulceration of the parts; or to glands and scirrhous tumours that block up the vagina.

Fourthly, when the under part of the uterus is contracted before the shoulders, or the body entangled in the navel-string.

Fifthly, from the wrong presentation of the child's head; that is, when the forehead is towards the groin, or middle of the os pubis; when the face presents with the chin to the os pubis, ischium, or sacrum; when the crown of the head rests above the os pubis, and the forehead or face is pressed into the hollow of the sacrum; and lastly, when one of the ears presents,

Sixthly, from the extraordinary ossification of the child's head, by which the bones of the skull are hindered from yielding as they are forced into the pelvis; and from a hydrocephalus, or dropsy, distending the head to such a degree, that it cannot pass along until the water is discharged.

Seventhly, from a too small or distorted pelvis, which often occurs in very little women, or such as have been ricketty in their childhood. See collect. xxiv. to xxx. and tab. xxviii.

In all these cases, except when the pelvis is too narrow, and the head too large, provided the head lies at the upper part of the brim, or (though pressed into the pelvis) can be easily pushed back into the uterus, the best method is to turn the child, and deliver by the feet, according to the directions which shall be given in the sequel; but if the head is pressed into the middle or lower part of the pelvis, and the uterus strongly contracted round the child, delivery ought to be performed with the forceps; and in all the seven cases, if the woman is in danger, and if you can neither turn nor deliver with the forceps, the head must be opened and delivered with the crotchets. Laborious cases, from some of the above-recited causes, happen much oftener than those we call preternatural; but those which proceed from a narrow pelvis, or a large head, are of the worst consequence.

These cases demand greater judgment in the operator, than those in which the child's head does not present; because in these last, we know, that the best and safest method is to deliver by the feet; whereas, in laborious births, we must maturely consider the cause that retards the head from coming along, together with the necessary assistance required; we must determine when we ought to wait patiently for the efforts of nature, and when it is absolutely necessary to come to her aid. If we attempt to succour her too soon, and use much force in the operation, so that the child and mother, or one of the two, are lost, we should be apt to reproach ourselves for having acted prematurely, upon the supposition that if we had waited a little longer, the pains might have by degrees delivered the child, or at least forced the head so low as that we might have extracted it with more safety by the assistance of the forceps. On the other hand, when we leave it to nature, perhaps by the strong pressure upon the head and brain, the child is dead when delivered, and the woman so exhausted with tedious labour, that her life is in imminent danger; in this case, we blame ourselves for delaying our help so long, reflecting, that had we delivered the patient sooner, without paying such scrupulous regard to the life of the child, the woman might have recovered without having run a dangerous risk. Doubtless it is our duty to save both mother and child, if possible; but if that is impracticable, to pay our chief regard to the parent; and in all dubious cases, to act cautiously and circumspectly, to the best of our judgment and skill.

If the head is advanced into the pelvis, and the uterus strongly contracted round the child, great force is required to push it back into the womb, because the effort must be sufficient to stretch the uterus, so as to re-admit the head, together with the hand and arm; and even then the child will be turned with great difficulty.

Should you turn when the head is too large, you may bring down the body of the child, but the head will stick fast above, and cannot be extracted without the help of the forceps or crotchets (see tab. xxxv. xxxvi.) yet the case is still worse in a narrow pelvis, even though the head be of an ordinary size. When things are so situated, you should not attempt to turn, because in so doing, you may give the woman a great deal of pain, and yourself much unnecessary fatigue; you ought, therefore, to try the forceps; and if they do not succeed, diminish the size of the head, and extract it as shall be afterwards shown.

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## S E C T. II.

### OF THE FILLETS AND FORCEPS.

WE have already observed, that the greatest number of difficult and lingering labours, proceed from the head's sticking fast in the pelvis, which situation is occasioned by one of the seven causes recited above. When formerly this was the case, the child was generally lost, unless it could be turned and delivered by the feet; or if it could be extracted alive, either died soon after delivery, or recovered with great difficulty from the long and severe compression of the head, while the life of the mother was endangered from the same cause as above described; for the pressure being reciprocal, the fibres and vessels of the soft parts contained in the pelvis, are bruised by the child's head, and the circulation of the fluids obstructed; so that a violent inflammation, and sometimes a sudden mortification, ensues. If the child could not be turned, the method practised in these cases,

cases, was to open the head, and extract with the crotchet; and this expedient produced a general clamour among the women, who observed, that when recourse was had to the assistance of a man-midwife, either the mother or child, or both, were lost. This censure, which could not fail of being a great discouragement to male practitioners, stimulated the ingenuity of several gentlemen of the profession, in order to contrive some gentler method of bringing along the head, so as to save the child, without any prejudice to the mother.

Their endeavours have not been without success; a more safe and certain expedient for this purpose hath been invented, and of late brought to greater perfection in this than in any other kingdom; so that if we are called in before the child is dead, or the parts of the woman in danger of a mortification, both the fœtus and mother may frequently be happily saved. This fortunate contrivance, is no other than the forceps, which was, as is alledged, first used here by the Chamberlains, by whom it was kept as a nostrum, and after their decease, so imperfectly known as to be seldom applied with success; so that different practitioners had recourse to different kinds of fillets, or lacks. Blunt hooks also, of various make, were invented in England, France, and other parts. The forceps, since the time of Dr. Chamberlain, have undergone several alterations, particularly in the joining, handles, form, and composition.

The common way of using them, formerly, was by introducing each blade at random, taking hold of the head any how, pulling it straight along, and delivering with downright force and violence; by which means, both os internum and externum, were often tore, and the child's head much bruised. On account of these bad consequences, they had been altogether disused by many practitioners, some of whom endeavoured in lieu of them to introduce divers kinds of fillets over the child's head; but none of them can be so easily used, or have near so many advantages, as the forceps, when rightly applied and conducted, according to the directions that shall be laid down in the next section.

Mr. Chapman, as mentioned in the Introduction, was the first author who described the forceps, with the method of using them; and we find in the observations of Giffard, several cases in which he delivered and saved the child by the assistance of this instrument. A forceps was also contrived at Paris, a drawing of which may be seen in the Medical Essays of Edinburgh, in a paper communicated by Mr. Butter, a surgeon. But after Mr. Chapman had published a delineation of his instrument, which was that originally used by the Chamberlains, the French adopted the same species, which, among them, went under the denomination of Chapman's Forceps. For my own part, finding in practice that by the directions of Chapman, Giffard, and Gregoire, at Paris, I frequently could not move the head along without confusing it, and tearing the parts of the woman; for they direct us to introduce the blades of the forceps where they will easiest pass, and taking hold of the head in any part of it, to extract with more or less force according to the resistance; I began to consider the whole in a mechanical view, and reduce the extraction of the child to the rules of moving bodies in different directions. In consequence of this plan, I more accurately surveyed the dimensions and form of the pelvis, together with the figure of the child's head, and the manner in which it passed along in natural labours; and from the knowledge of these things, I not only delivered with greater ease and safety than before, but also had the satisfaction



to find, in teaching, that I could convey a more distinct idea of the art in this mechanical light, than in any other; and particularly give more sure and solid directions for applying the forceps, even to the conviction of many old practitioners, when they reflect on the uncertainty attending the old method of application. From this knowledge, too, joined with experience, and hints which have occurred and been communicated to me, in the course of teaching and practice, I have been led to alter the form and dimensions of the forceps, so as to avoid the inconveniences that attend the use of the former kinds. See tab. xxxvii.

The consideration of mechanics, applied to midwifery, is likewise in no case more useful than when the child must be turned and delivered by the feet; because there we are principally to regard the contraction of the uterus, the position of the child, and the method of moving a body confined in such a manner; but I have advanced nothing in mechanics but what I find useful in practice, and in conveying a distinct notion of the several difficulties that occur to those who are or have been under my instruction, for whom this Treatise is principally designed.

The larks, or fillets, are of different kinds, of which the most simple is a noose made on the end of a fillet, or limber garter; but this can only be applied before the head is fast jammed in the pelvis, or when it can be pushed up and raised above the brim. The os externum and internum having been gradually dilated, this noose must be conveyed on the ends of the fingers, and slipped over the fore and hind-head. There are also other kinds differently introduced upon various blunt instruments, too tedious either to describe or use; but the most useful of all these contrivances, is a fillet, made in form of a sheath, mounted upon a piece of slender whale-bone, about two feet in length, which is easier applied than any other expedient of the same kind. See tab. xxxviii.

When the head is high up in the pelvis, if the woman has been long in labour, and the waters discharged for a considerable time, the uterus being strongly contracted so as that the head and shoulders cannot be raised, or the child turned to be delivered by the feet, while the mother is enfeebled, and the pains so weak, that unless assisted, she is in danger of her life; also when the os internum, vagina, and labia pudendi, are inflamed and tumefied; or when there is a violent discharge of blood from the uterus, provided the pelvis is not too narrow, nor the head too large, this fillet may be successfully used; in which case, if the os externum and internum are not already sufficiently open, they must be gradually dilated as much as possible by the hand, which at the same time must be introduced and passed along the side of the head, in order to ascertain the position thereof. This being known, let the other hand introduce the double of the whale-bone and fillet over the face and chin, where you can have the best purchase, and where it will be least apt to slip and lose its hold. This application being effected, let the hand be brought down, and the whale-bone drawn from the sheath of the fillet, which (after the ends of it are tied together) must be pulled during every pain, pressing at the same time with the other hand upon the opposite part of the head, and using more or less force according to the resistance.

The disadvantage attending all fillets, is the great difficulty in introducing and fixing them; and though this last is easier applied than the others, yet when the vertex presents, the child's chin is so pressed to the breast, that it is often impracticable to insinuate the fillet between them, and

and if it is fixed upon the face or hind-head it frequently slips off in pulling. But, granting it commodiously fixed, when the head is large or the pelvis narrow, so that we are obliged to pull with great force, the fillet will gill and even cut the soft parts to the very bone; and if the child comes out on a sudden in consequence of violent pulling, the external parts of the woman are in great danger of sudden laceration: but if the head is small, and comes along with a moderate force, the child may be delivered by this contrivance, without any bad consequence; though in this case, we find by experience, that unless the woman has some very dangerous symptom, the head will in time slide gradually down into the pelvis, even when it is too large to be extracted with the fillet or forceps, and the child be safely delivered by the labour-pains, although slow and lingering, and the mother seems weak and exhausted, provided she be supported with nourishing and strengthening cordials.

From what I have said, the reader ought not to imagine that I am more bigotted to any one contrivance than to another. As my chief study hath been to improve the Art of Midwifery, I have considered a great many different methods, with a view of fixing upon that which should best succeed in practice: I have tried several kinds of lacks, which have been from time to time recommended to me; and in particular, the last-mentioned fillet, which was communicated to me by the learned Dr. Mead in 1743. As this fillet could, in all appearance, be more easily introduced than any other, I, for several years, carried it with me when I was called in difficult cases, and sometimes used it accordingly: but I generally found the fixing of this, as well as all other lacks, so uncertain, that I was obliged to have recourse to the forceps, which being introduced with greater ease, and fixed with more certainty, seldom failed to answer the purpose better than any other method hitherto found out: but let not this assertion prevent people of ingenuity from employing their talents in improving these or any other methods that may be safe and useful; for daily experience proves that we are still imperfect, and very far from the *ne plus ultra* of discovery in arts and sciences; though I hope every gentleman will despise and avoid the character of a selfish secret-monger.

As the head in the 6th and 7th cases is forced along the pelvis, commonly in these laborious cases the bones of the cranium are so compressed, that they ride over one another, so that the bulk of the whole is diminished, and the head, as it is pushed forward, is, from a round, altered into an oblong figure: when therefore it is advanced into the pelvis, where it sticks fast for a considerable time, and cannot be delivered by the labour-pains, the forceps may be introduced with great ease and safety, like a pair of artificial hands, by which the head is very little (if at all) marked, and the woman very seldom tore. But if the head is detained above the brim of the pelvis, or a small portion of it only farther advanced, and it appears that the one being too narrow, or the other too large, the woman cannot be delivered by the strongest labour-pains: in that case the child cannot be saved, either by turning and bringing it by the feet, or delivered by the application of fillet or forceps; but the operator must unavoidably use the disagreeable method of extracting with the crotchet. Nevertheless, in all these cases, the forceps ought first to be tried; and sometimes they will succeed beyond expectation, provided the birth is retarded by the weakness of the woman, and the second, third, fourth, or fifth obstructions. But they cannot be depended upon, even when the vertex presents, with the forehead to the side or back part of the pelvis, and

(though)

(though the woman has had strong pains for many hours after the membranes are broke) the head is not forced down into the pelvis, or at least but an inconsiderable part of it, resembling the small end of a sugar-loaf; for, from these circumstances, you may conclude, that the largest part of it is still above the brim, and that either the head is too large or the pelvis too narrow. Even in these cases, indeed, the last fillet, or a long pair of forceps, may take such firm hold, that with great force and strong purchase the head will be delivered: but such violence is commonly fatal to the woman, by causing such an inflammation, and perhaps laceration, of the parts, as is attended with mortification. In order to disable young practitioners from running such risks, and to free myself from the temptation of using too great force, I have always used and recommended the forceps so short in the handles, that they cannot be used with such violence as will endanger the woman's life; though the purchase of them is sufficient to extract the head, when one-half or two-thirds of it are equal to, or past, the upper or narrow part of the pelvis.

When the head is high the forceps may be locked in the middle of the pelvis; but in that case great care must be taken in feeling with the fingers all round, that no part of the vagina be included in locking. Sometimes, when the head rests, or is pressed too much on the fore part or side of the pelvis, either at the brim or lower down, by introducing one blade it may be moved farther down, provided the labour-pains are strong, and the operation assisted by the fingers of the other hand applied to the opposite side of the head; but if the fingers cannot reach high enough, the best method is to turn or move the blade towards the ear of the child, and introduce the other along the opposite side.

In a narrow pelvis I have sometimes found the head of the child thrown so much forward over the os pubis, by the jutting-in of the sacrum and lower vertebra of the loins, that I could not push the handles of the forceps far enough back to include within the blades the bulky part of the head which lay over the pubes. To remedy this inconvenience, I contrived a longer pair, curved on one side, and convex on the other: but these ought never to be used except when the head is small; for, as we have already observed, when the head is large, and the greatest part of it remains above the brim, the parts of the woman may be inflamed and contused by the exertion of too much force. Nevertheless, this kind of forceps may be advantageously used when the face presents and is low down, and the chin turned to the sacrum; because, in that case, the occiput is towards the pubes, so that the ends of the blades can take firmer hold of the head; but then the chin cannot be turned below the pubes so easily with these as with the other kind, nor the hind-head be brought below these last bones. See tab. xxvi.

### S E C T. III.

#### GENERAL RULES FOR USING THE FORCEPS.

THE farther the head is advanced in the pelvis, the easier it is delivered with the forceps; because then, if in the 6th or 7th case, it is changed from a round to an oblong figure, by being forced along by the labour-pains; on the contrary, when the head remains high up, resting upon the brim of the pelvis, the forceps are used with greater difficulty and uncertainty.



The os externum must be gradually opened by introducing the fingers one after another in form of a cone, after they have been lubricated with pomatum, moving and turning them in a semicircular motion as they are pushed up. If the head is so low down that the hand cannot be introduced high up in this form, let the parts be dilated by the fingers turned in the direction of the coccyx, the back of the hand being upwards, next to the child's head: the external parts being sufficiently opened to admit all the fingers, let the back of the hand be turned to the perinæum, while the fingers and thumb, being flattened, will slide along betwixt the head and the os sacrum. If the right-hand be used, let it be turned a little to the left side of the pelvis, because the broad ligament and membrane that fill up the space between the sacrum and ischia, will yield and allow more room for the fingers to advance; for the same reason, when the left-hand is introduced, it must be turned a little to the right side. Having gained your point so far, continue to push up, until your fingers pass the os internum; at the same time, with the palm of your hand, raise or scoop up the head, by which means you will be more at liberty to reach higher, dilate the internal parts, and distinguish the situation and size of the head, together with the dimensions of the pelvis; from which investigation you will be able to judge whether the child ought to be turned and brought by the feet, or delivered with the forceps; or, if the labour-pains are strong, and the head presents tolerably fair, without being jammed in the pelvis, you will resolve to wait some time, in hope of seeing the child delivered by the labour-pains, especially when the woman is in no immediate danger, and the chief obstacle is the rigidity of the parts.

The position of the head is distinguished by feeling for one of the ears, the fore or smooth part of which is towards the face of the child: if it cannot be ascertained by this mark, the hand and fingers must be pushed farther up, to feel for the face or back part of the neck; but if the head cannot be traced, the observation must be taken from the fontanel, or that part of the cranium where the lambdoidal crosses the end of the sagittal suture. When the ears of the child are towards the sides of the pelvis, or diagonal, the forehead being either to the sacrum or pubes, the patient must lie on her back, with her breech a little over the bed, her legs and thighs being supported as directed in chap. ii. sect. i. and chap. iv. sect. iv. If one ear is to the sacrum, and the other to the pubes, she must be laid on one side, with her breech over the bed, as before, her knees being pulled up to her belly, and a pillow placed between them; except when the upper part of the sacrum juts too much forward, in which case she must lie upon her back, as above described.

The blades of the forceps ought always, if possible, to be introduced along the ears; by which means they approach nearer to each other, gain a firmer hold, and hurt the head less than in any other direction; frequently, indeed, not the least mark of their application is to be perceived; whereas, if the blades are applied along the forehead and occiput, they are at a greater distance from each other, require more room, frequently at their points press in the bones of the skull, and endanger a laceration in the os externum of the woman. See tab. xvi.

The woman being laid in a right position, for the application of the forceps, the blades ought to be privately conveyed between the feather-bed and the clothes, at a small distance from one another, or on each side of the patient: that this conveyance may be the more easily effected, the legs of the instrument ought to be kept in the operator's side-pockets. Thus

provided, when he sits down to deliver, let him spread the sheet that hangs over the bed, upon his lap, and, under that cover, take out and dispose the blades on each side of the patient; by which means he will often be able to deliver with the forceps, without their being perceived by the woman herself or any other of the assistants. Some people pin a sheet to each shoulder, and throw the other end over the bed, that they may be the more effectually concealed from the view of those who are present; but this method is apt to confine and embarrass the operator. At any rate, as women are commonly frightened at the very name of an instrument, it is advisable to conceal them as much as possible, until the character of the operator is fully established.

### S E C T. IV.

#### THE DIFFERENT WAYS OF USING FORCEPS.

##### N U M B. I.

##### WHEN THE HEAD IS DOWN TO THE OS EXTERNUM.

**W**HEN the head presents fair, with the forehead to the sacrum, the occiput to the pubes, and the ears to the sides of the pelvis, or a little diagonal; in this case, the head is commonly pretty well advanced in the basin, and the operator seldom miscarries in the use of the forceps. Things being thus situated, let the patient be laid on her back, her head and shoulders being somewhat raised, and the breech advanced a little over the side or foot of the bed, while the assistants, sitting on each side, support her legs, at the same time keeping her knees duly separated and raised up to the belly, and her lower parts always covered with the bed-clothes, that she may not be apt to catch cold. In order to avoid this inconvenience, if the bed is at a great distance from the fire, the weather cold, and the woman of a delicate constitution, a chafing-dish with charcoal, or a vessel with warm water, should be placed near or under the bed. These precautions being taken, let the operator place himself upon a low chair, and having lubricated with pomatum the blades of the forceps, and also his right hand and fingers, slide first the hand gently into the vagina, pushing it along in a flattened form, between that and the child's head, until the fingers have passed the os internum; then with his other hand, let him take one of the blades of the forceps from the place where it was deposited, and introduce it betwixt his right-hand and the head; if the point or extremity of it should stick at the ear, let it be slipped backward a little, and then guided forward with a slow and delicate motion; when it shall have passed the uteri, let it be advanced still farther up, until the rest, at which the blades lock into each other, be close to the lower part of the head, or at least within an inch thereof.

Having in this manner introduced one blade, let him withdraw his right hand, and insinuate his left, in the same direction, along the other side of the head, until his fingers shall have passed the os internum; then taking out the other blade from the place of concealment, with the hand that is disengaged, let it be applied to the other side of the child's head, by the same means employed in introducing the first; then the left-hand must be withdrawn, and the head being embraced between the blades, let them be locked in each other. Having thus secured them, he must take a firm hold with both hands, and when the pain comes on, begin to pull the head along from side to side; continuing this operation during every pain until the vertex appears through the os externum, and the neck of the child can be felt with the finger below the os pubis; at which time the forehead pushes out  
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the perinæum like a large tumour; then let him stand up, and raising the handles of the forceps, pull the head upwards also, that the forehead being turned half round upwards, the perinæum and lower parts of the os externum may not be tore.

In stretching the os externum or internum we ought to imitate nature; for, in practice, we find, that when they are opened slowly, and at intervals, by the membranes with the waters or the child's head, the parts are seldom inflamed or lacerated; but in all natural labours, when these parts are suddenly opened, and the child delivered by strong and violent pains, without much intermission, this misfortune sometimes happens, and the woman is afterwards in great pain and danger.

We ought therefore, when obliged to dilate those parts, to proceed in that slow deliberate manner; and though, upon the first trial, they feel so rigid, that one would imagine they could never yield or extend; yet, by stretching with the hand and resting by intervals, we can frequently overcome the greatest resistance. We must also, in such cases, be very cautious, pulling slowly, with intermissions, in order to prevent the same laceration; for which purpose too, we ought to lubricate the perinæum with pomatum during those short intervals, and keep the palm of one hand close pressed to it and the neighbouring parts, while with the other we pull at the extremity of the handles of the forceps; by which means we preserve the parts, and know how much we may venture to pull at a time. When the head is almost delivered, the parts thus stretched must be slipped over the forehead and face of the child, while the operator pulls upwards with the other hand, turning the handles of the forceps to the abdomen of the woman. This method of pulling upwards raises the child's head from the perinæum, and the half-round turn to the abdomen of the mother brings out the forehead and face from below; for when that part of the hind-head which is joined to the neck rests at the under part of the os pubis, the head turns upon it as upon an axis. In preternatural cases also, the body being delivered, must in the same manner be raised up over the belly of the mother, at the same time the perinæum slipped over the face and forehead of the child.

In the introduction of the forceps, let each blade be pushed up in an imaginary line from the os externum to the middle space betwixt the navel and scrobiculus cordis of the woman; or, in other words, the handles of the forceps are to be held as far back as the perinæum will allow. The introduction of the other hand to the opposite side, will, by pressing the child's head against the first blade, detain it in its proper place till the other can be applied; or, if this pressure should not seem sufficient, it may be supported by the operator's knee.

When the head is come low down, and cannot be brought farther, because one of the shoulders rests above the os pubis, and the other upon the upper part of the sacrum, let the head be strongly grasped with the forceps, and pushed up as far as possible, moving from blade to blade as you push up, that the shoulders may be the more easily moved to the sides of the pelvis, and turning the face or forehead a little towards one of them; then the forehead must be brought back again into the hollow of the sacrum, and another effort made to deliver; but should the difficulty remain, let the head be pushed up again, and turned to the other side; because it is uncertain which of the shoulders rests on the os pubis or sacrum. Suppose, for example, the right shoulder of the child sticks above the os pubis, the forehead being in the hollow of the sacrum; in this case, if the forehead be turned to the



right-hand side of the woman, the shoulder will not move ; whereas, if it be turned to the left, and the head at the same time pushed a little upwards, so as to raise and disengage the parts that are fixed, the right shoulder being towards the right-hand side and the other to the left side of the brim of the pelvis, when the forehead is turned back again to the hollow of the sacrum, the obstacle will be removed, and the head be more easily delivered. This being performed, let the forceps be unlocked and the blades disposed cautiously under the clothes so as not to be discovered ; then proceed to the delivery of the child, which, when the navel-string is cut and tied, may be committed to the nurse. The next care is to wipe the blades of the forceps singly, under the clothes, slide them warily into your pockets, and deliver the placenta.

Though the forceps are covered with leather, and appear so simple and innocent, I have given directions for concealing them, that young practitioners, before their characters are fully established, may avoid the calumnies and misrepresentations of those people who are apt to prejudice the ignorant and weak-minded against the use of any instrument, though ever so necessary, in this profession ; and who, taking the advantage of unforeseen accidents which may afterwards happen to the patient, charge the whole misfortune to the innocent operator. See collect. xxvii. and tab. xiv. xvii. xviii. xix.

### N U M B. II.

#### WHEN THE FOREHEAD IS TO THE OS PUBIS.

**W**HEN the forehead, instead of being towards the sacrum, is turned forwards to the os pubis, the woman must be laid in the same position as in the former case ; because here also the ears of the child are towards the sides of the pelvis, or a little diagonally situated, provided the forehead is towards one of the groins. The blades of the forceps being introduced along the ears, or as near them as possible, according to the foregoing directions, the head must be pushed up a little, and the forehead turned to one side of the pelvis ; thus let it be brought along until the hind-head arrives at the lower part of the ischium ; then the forehead must be turned backward, into the hollow of the sacrum, and even a quarter or more to the contrary side, in order to prevent the shoulders from hitching on the upper part of the os pubis, or sacrum, so that they may be still towards the sides of the pelvis ; then let the quarter-turn be reversed, and the forehead being replaced in the hollow of the sacrum, the head may be extracted as above. In performing these different turns, let the head be pushed up or pulled down occasionally as it meets with least resistance. In this case, when the head is small, it will come along as it presents ; but if large, the chin will be so much pressed against the breast, that it cannot be brought up with the half-round turn, and the woman will be tore if it comes along. See collect. xxviii. and tab. xx. xxi.

### N U M B. III.

#### WHEN IT PRESENTS FAIR AT THE BRIM OF THE PELVIS.

**W**HEN the forehead and face of the child are turned to the side of the pelvis (in which case it is higher than in the first situation) it will be difficult, if the woman lies on her back, to introduce the forceps so as to grasp the

the head with a blade over each ear; because the head is often pressed so hard against the bones, in this position, that there is no room to insinuate the fingers between the ear and the os pubis, so as to introduce the blades safely on the inside of the os internum, or push one of them up between the fingers and the child's head. When things are so situated, the best posture for the woman is that of lying on one side, as formerly directed, because the bones will yield a little, and the forceps (of consequence) may be the more easily introduced.

Suppose her lying on her left side, and the forehead of the child turned to the same side of the pelvis, let the finger of the operator's right hand be introduced along the ear, between the head and the os pubis, until they pass the os internum; if the head is so immoveably fixed in the pelvis, that there is no passage between them, let his left hand be pushed up between the sacrum and the child's head, which being raised as high as possible above the brim of the pelvis, he will have room sufficient for his fingers and forceps; then let him slide up one of the blades with the right hand, remembering to press the handle backwards to the perinæum, that the point may humour the turn of the sacrum and child's head; this being effected let him withdraw his left hand, with which he may hold the handle of the blade already introduced, while he insinuates the fingers of his right hand at the os pubis, as before directed, and pushes up the other blade slowly and gently, that he may run no risk of hurting the os internum or bladder; and here also keep the handle of it as far backwards as the perinæum will allow; when the point has passed the os internum, let him slide it up farther, and join the legs by locking them together, keeping them still in a line with the middle space, betwixt the navel and scrobiculus cordis. Then let him pull along the head, moving it from side to side, or from one ear of the child to another. When it is sufficiently advanced, let him move the forehead into the hollow of the sacrum, and a quarter-turn farther, then bring it back into the same cavity; but if the head will not easily come along, let the woman be turned on her back, after the forceps have been fixed, and the handles firmly tied with a garter or fillet; let the hind-head be pulled half round outwards, from below the os pubis, and the instrument and child managed as before.

In all those cases that require the forceps, if the head cannot be raised above the brim of the pelvis, or the fingers introduced within the os internum, to guide the points of the forceps along the ears, especially at the ossa pubis, ischiâ, or sacrum, let the fingers and hand be pushed up as far as they will go along the open space betwixt the sacrum and ischium; then one of the blades may be introduced, moved to, and fixed over the ear, the situation of which is already known; the other hand may be introduced, and the other blade conducted in the same manner on the opposite side of the pelvis; but before they are locked together, care must be taken that they be exactly opposite to each other, and both sufficiently introduced. In this case, if the operator finds the upper part of the sacrum jutting-in so much that the point of the forceps cannot pass it, let him try with his hand to turn the forehead a little backwards, so that one ear will be toward the groin, and the other toward the side of that prominence; consequently there will be more room for the blades to pass along the ears; but if the forehead should remain immovable, or, though moved, return to its former place, let one blade be introduced behind one ear, and its fellow before the other; in which case the introduction is sometimes more easily performed.

formed when the woman lies on her back, than when she is laid on one side. See collect. xxix. and tab. xiii. xvi.

#### N U M B. IV.

##### WHEN THE FACE PRESENTS.

**W**HEN the face presents, resting on the upper part of the pelvis, the head ought to be pushed up to the fundus uteri, the child turned and brought by the feet, according to the directions that will be given when we come to treat of preternatural deliveries; because the hind-head is turned back on the shoulders, and, unless very small, cannot be pulled along with the forceps; but should it advance pretty fast in the pelvis, it will be sometimes delivered alive without any assistance. But if it descends slowly, or, after it is low down, sticks for a considerable time, the long pressure on the brain frequently destroys the child, if not relieved in time by turning or extracting with the forceps.

When the head is detained very high up, and no signs of its descending appear, and the operator, having stretched the parts with a view to turn, discovers that the pelvis is narrow and the head large, he must not proceed with turning, because after this hath been performed, perhaps with great difficulty, the head cannot be delivered without the assistance of the crotchet. No doubt it would be a great advantage in all cases where the face or forehead presents, if we could raise the head so as to alter the bad position, and move it so with our hand as to bring the crown of the head to present; and indeed this should always be tried, and more especially when the pelvis is too narrow, or the head too large, and when we are dubious of saving the child by turning; but frequently this is impossible to be done when the waters are evacuated, the uterus strongly contracted on the child, and the upper part of the head so slippery as to elude our hold; insomuch, that even when the pressure is not great, we seldom succeed unless the head is small, and then we can save the child by turning. If you succeed, and the woman is strong, go on as in natural labour; but if this fails, then it will be more advisable to wait with patience for the descent of the head, so as that it may be delivered with the forceps, and consequently the child may be saved; but if it still remains in its high situation, and the woman is weak and exhausted, the forceps may be tried; and should they fail, recourse must be had to the crotchet, because the mother's life is always to be more regarded than the safety of the child.

When the face of the child is come down, and sticks at the os externum, the greatest part of the head is then squeezed down into the pelvis, and, if not speedily delivered, the child is frequently lost by the violent compression of the brain; besides, when it is so low down, it seldom can be returned, on account of the great contraction of the uterus. In this case, when the chin is turned towards the os pubis, at the lower part of that bone, the woman must be laid on her back, the forceps introduced as formerly directed in the first case, and when the chin is brought out from under the os pubis, the head must be pulled half round upward, by which means the fore and hind-head will be raised from the perinæum, and the under part of the os internum prevented from being tore.

If the chin points to either side of the pelvis, the woman must be laid on her side; the blades of the forceps introduced along the ears, one at the os pubis, and the other at the sacrum; and the chin, when brought lower down, turned to the pubis, and delivered; for the pelvis being only two inches



inches in depth at this place, the chin is easily brought from under it, and then the head is at liberty to be turned half-round upward; because the chin, being disengaged from this bone, can be pulled up over it externally; by which means two inches of room at least will be gained for the more easy delivery of the fore and hind-head, which are now pressed against the perinæum. When the chin is towards the sacrum, and the hind-head pressed back betwixt the shoulders, so that the face is kept from rising up below the os pubis, the head must be pushed up with the hand to the upper part of the pelvis, and the forceps introduced and fixed on the ears; the hind-head must be turned to one side of the pelvis, while the chin is moved to the other side, and, if possible, to the lower part of the ischium; then the hind-head must be brought into the hollow of the sacrum, with the chin below the os pubis, and delivered as above directed. If this cannot be done, let the operator try with the forceps to pull down the hind-head below the os pubis, and at the same time with the fingers of the other hand push the face and forehead backwards and upwards into the hollow of the sacrum.

For when the chin points to the back part of the pelvis, the forehead is squeezed against the os pubis, while the hind-head is pressed upon the back betwixt the shoulders; so that the head cannot be delivered unless the occiput can be brought out from below the os pubis, as formerly described. See tab. xxiii. xxv. xxvi.

#### N U M B. V.

THE sum of all that has been said on this head, may be comprehended in the following general maxims:

Young practitioners are often at a loss to know and judge by the touch in the vagina, when the head is far enough down in the basin for using the forceps. If we were to take our observations from what we feel of the head at the os pubis, we should be frequently deceived, because in that place the pelvis is only two inches in depth, and the head will seem lower down than it really is; but if in examining backwards, we find little or no part of it towards the sacrum, we may be certain that all the head is above the brim; if we find it down as far as the middle of the sacrum, one-third of it is advanced; if as far down as the lower part, one-half; and in this case, the largest part is equal with the brim. When it is in this situation, we may be almost certain of succeeding with the forceps; and when the head is so low as to protrude the external parts, they never fail. But these things will differ according to different circumstances, that may occasion a tedious delivery.

Let the operator acquire an accurate knowledge of the figure, shape, and dimensions of the pelvis, together with the shape, size, and position of the child's head.

Let the breech of the woman be always brought forwards a little over the bed, and her thighs pulled up to her belly, whether she lies on her side or back, to give room to apply and to move the forceps up or down or from side to side.

Let the parts be opened and the fingers pass the os internum; in order to which, if it cannot be otherwise accomplished, let the head be raised two or three inches, that the fingers may have more room; if the head can be raised above the brim, your hand is not confined by the bones; for, as we have already observed, the pelvis is wider from side to side at the brim than at the lower part; if the fingers are not past the os uteri, it is in danger of being included betwixt the forceps and the child's head.

The forceps, if possible, should pass along the ears, because in that case they seldom or never hurt or mark the head.

They ought to be pushed up in an imaginary line, towards the middle space between the navel and scrobiculus cordis, otherwise the ends will run against the sacrum.

The forehead ought always to be turned into the hollow of the sacrum, when it is not already in that situation.

When the face presents, the chin must be turned to below the os pubis, and the hind-head into the hollow of the sacrum.

When the shoulders rest at the pubes, where they are detained, the head must be turned a large quarter to the opposite side, so as that they may lie towards the sides of the pelvis.

The head must be always brought out with an half-round turn, over the outside of the os pubis, for the preservation of the perinæum, which must at the same time be supported with the flat of the other hand, and slide gently backwards over the head.

When the head is so low as to protrude the parts in form of a large tumour, and the vertex hath begun to dilate the os externum, but, instead of advancing, is long detained in that situation, from any of the fore-mentioned causes of laborious cases, and the operator cannot exactly distinguish the position of the head, let him introduce a finger between the os pubis and the head, and he will frequently find the back part of the neck, or one ear, at the fore part or towards the side of the pelvis. When the situation is known, he needs not stretch the os externum, and raise the head, as formerly directed; but he may introduce the forceps, and, they being properly joined and their handles tied, pull gently during every pain, or, if the pains are gone, at the interval of four or five minutes, that the parts may be slowly dilated, as they are in the natural labour; but when the situation cannot be known, the head ought to be raised. The same method may also be taken when the face presents, and is low in the pelvis, except when the chin is toward the back part; in this case the head ought to be raised likewise.

Almost all these directions are to be followed, except when the head is small; in which case it may be brought along by the force of pulling: but this only happens when the woman is reduced, and the labour-pains are not sufficient to deliver the child; for the lower part of the uterus may be so strongly contracted before the shoulders, and so close to the neck of the child as to prevent its advancing, even when the head is so loose in the pelvis, that we can sometimes push our fingers all round it: and this is frequently the occasion of preventing the head being delivered when low in the pelvis. The difficulty, when high up, is from the restraint at the brim; and when it passes that, the head is seldom retained in the lower part, unless the patient is weak. In this case we need not wait, because we are commonly certain of relieving the woman immediately with the forceps, by which you prevent the danger that may happen, both to the mother and child, by the head continuing to lodge there too long. This case should be a caution against breaking the membranes too soon, because the uterus may contract too forcibly and too long before the shoulders: when the head in this case is advanced one-third or half-way on the outside of the os externum, if the pains are strong, this last inconvenience is frequently remedied by introducing your two fingers into the rectum, as formerly directed. By these rules, delivery may (for the most part) be performed with ease and safety. Nevertheless the head is sometimes so

squeezed

squeezed and locked in the pelvis, and the hairy scalp so much swelled, that it is impracticable to raise up the head so as to come at the ears or os internum, or to distinguish the sutures of the skull so as to know how the head presents. In this case the forceps must be introduced at random, and the uncertainty of the position generally removed by remembering, that in those cases where the head is squeezed down with great difficulty, the ears are for the most part towards the os pubis and sacrum; and that the forehead seldom turns into the hollow of the sacrum, before the occiput is come down to the lower part of the ischium; and then rises gradually towards the under part of the os pubis, and the perinæum and anus are forced down before it in form of a large tumour.

On such occasions, the woman being laid on her side, if one ear is to the sacrum and the other to the os pubis, the blades of the forceps are to be introduced; and if they meet with any resistance at the points, they must not be forcibly thrust up, lest they pass on the outside of the os uteri and tear the vagina, which together with the womb would be included in the instrument and pulled along with the head: for this reason, if the blade does not easily pass, let it be withdrawn a little downwards, as before directed, and pushed up again, moving the point close to the head; if the ear-obstructs its passage, let the point be brought a little outwards: and by these cautious essays it will at length pass without farther resistance, and ought to be advanced a considerable way in order to certify the operator that he is not on the outside of the os internum.

When the forceps are fixed, and the operator uncertain which way the forehead lies, let him pull slowly, and move the head with a quarter-turn, first to one side, and then to the other, until he shall have found the direction in which it comes most easily along.

If at any time we find the forceps begin to slip, we must rest and push them up again gently: but if they are like to slide off at a side, untie the handles, and move them so as to take a firmer hold; fix as before, and deliver. If we are obliged to hold with both hands, the parts may be supported by the firm application of an assistant's hand: for without such cautious management they will run a great risk of being lacerated; a misfortune which rarely happens when the perinæum is properly pressed back, and the head leisurely delivered. Sometimes, when the head is brought low down, you may take off the forceps, and help along with your fingers on each side of the coccyx, or in the rectum, as directed in the natural labour.

If the head is low down, the ears are commonly diagonal, or to the sides; and when the head is brought down one-third or one-half through the os externum, the operator can then certify himself whether the forehead is turned to the coccyx or os pubis, by feeling with his finger for the back part of the neck or ear, betwixt the os pubis and the head; and then move the head as above directed.

Let him try to alter with his hand every bad position of the head; and if it be detained high up in the pelvis, in consequence of the woman's weakness, the rigidity of the parts, the circumvolutions or shortness of the funis, or the contraction of the uterus over the shoulders of the child, the forceps will frequently succeed when the fœtus cannot be turned; but if the head is large or the pelvis narrow, the child is seldom saved either by turning or using the forceps, until the head shall be farther advanced. And here it will not be amiss to observe, that the blades of the forceps ought to be new-covered with stripes of wash-leather after they shall



have been used, especially in delivering a woman suspected of having an infectious distemper. See collect. xxx.

### S E C T. V.

#### WHEN AND HOW TO USE THE CROTCHET.

##### N U M B. I.

##### THE SIGNS OF A DEAD CHILD.

**W**HEN the head presents, and cannot be delivered by the labour-pains; when all the common methods have been used without success, the woman being exhausted, and all her efforts vain; and when the child cannot be delivered without such force as will endanger the life of the mother, because the head is too large or the pelvis too narrow; it then becomes absolutely necessary to open the head and extract with the hand, forceps, or crotchet. Indeed, this last method formerly was the common practice when the child could not be easily turned, and is still in use with those who do not know how to save the child by delivering with the forceps; for this reason their chief care and study was to distinguish whether the foetus was dead or alive; and as the signs were uncertain, the operation was often delayed until the woman was in the most imminent danger; or, when it was performed sooner, the operator was frequently accused of rashness, on the supposition that the child might in time have been delivered alive by the labour-pains. Perhaps he was sometimes conscious to himself of the justice of this imputation, although what he had done was with an upright intention.

The signs of a dead foetus were, first, the child's ceasing to move and stir in the uterus. Secondly, the evacuation of meconium, though the breech is not pressed into the pelvis. Thirdly, no perceivable pulsation at the fontanel and temporal arteries. Fourthly, a large swelling or tumour of the hairy scalp. Fifthly, an uncommon laxity of the bones of the cranium. Sixthly, the discharge of a foetid ichor from the vagina, the effluvia of which surrounding the woman, gave rise to the opinion that her breath conveyed a mortified smell. Seventhly, want of motion in the tongue when the face presents. Eighthly, no perceivable pulsation in the arteries of the funis umbilicalis, when it falls down below the head; nor at the wrist, when the arm presents; and no motion of the fingers. Ninthly, the pale and livid countenance of the woman. Tenthly, a collapsing and flaccidity of the breasts. Eleventhly, a coldness felt in the abdomen, and weight, from the child's falling, like a heavy ball, to the side on which she lies. Twelfthly, a separation of the hairy scalp on the slightest touch, and a distinct perception of the bare bones.

All or most of these signs are dubious and uncertain, except the last, which can only be observed after the foetus hath been dead several days. One may also certainly pronounce the child's death, if no pulsation hath been felt in the navel-string for the space of twenty or thirty minutes; but the same certainty is not to be acquired from the arm, unless the skin can be stripped off with ease.

##### N U M B. II.

##### WHEN THE CROTCHET IS TO BE USED.

**M**IDWIFERY is now so much improved, that the necessity of destroying the child does not occur so often as formerly. Indeed it never should be done, except when it is impossible to turn or deliver with the forceps;

forceps; and this is seldom the case but when the pelvis is too narrow, or the head too large to pass, and therefore rests above the brim. For this reason, it is not so necessary for the operator to puzzle himself about dubious signs; because, in these two cases, there is no room for hesitation; for if the woman cannot possibly be delivered in any other way, and is in imminent danger of her life, the best practice is undoubtedly to have recourse to that method which alone can be used for her preservation, namely, to diminish the bulk of the head.

In this case, instead of destroying, you are really saving a life; for, if the operation be delayed, both mother and child are lost.

## S E C T. VI.

## THE OLD METHOD OF EXTRACTING THE HEAD.

VARIOUS have been the contrivances intended for this purpose. Some practitioners, when the head did not advance in the pelvis, introduced the *speculum matricis*, in order to stretch the bones asunder, and thereby increase the capacity of the basin; if, after this operation, the woman could not be delivered with her pains, they fixed a large screw in the head, by which they pulled with great force. Others opened the head with a large bistory, or a short broad-bladed knife in form of a myrtle-leaf, or with a crooked bistory with a long handle; then a small pair of forceps with teeth were introduced; and one blade being insinuated into the opening, they laid hold of the skull and pulled the head along; they likewise made use of different kinds of crotchets both sharp and blunt; and when the head was lower down, they practised the same expedient.

Albucasis has also given the draught of an instrument, which is both for opening and extracting the head; the point and wings are forced through the cranium, and when turned the contrary way, the two wings are forced to take hold of the inside.

There are other later contrivances used and recommended by different gentlemen of the profession, such as Mauriceau's *tire-tete*, Simpson's scalping, and Oald's *terebra occulta*, with the improvement made in it by Dr. Burton, of York; and all these instruments may be used with success, if cautiously managed, so as not to injure the woman; except the *speculum matricis*, which far from answering the supposed intention of it, namely, to extend the bones of the pelvis, can serve no other purpose than that of bruising or inflaming the parts of the woman.

The following method, if exactly followed according to the circumstances of the case, seems of all others hitherto invented, the easiest, safest, and most certain, especially when it requires great force to extract the head,

## S E C T. VII.

## THE METHOD OF USING THE SCISSARS, BLUNT-HOOK, AND CROTCHET,

WHEN the head presents, and such is the case that the child can neither be delivered by turning nor extracted with the forceps, and it is absolutely necessary to deliver the woman to save her life, this operation must then be performed in the following manner;

The operator must be provided with a pair of curved crotchets, made according to the improvements upon those proposed by Mesnard, together with a pair of scissars about nine inches long, with rests near the middle of the blades, and the blunt-hook.

## N U M B. I.

## OF THE WOMAN'S POSTURE.

**T**HE patient ought to be laid on her back or side, in the same position directed in the use of the forceps; the operator must be seated on a low chair, and the instruments concealed and disposed in the same manner, and for the same reason, mentioned in treating of the forceps. The parts of the woman have already, in all likelihood, been sufficiently dilated by his endeavours to turn or deliver with the forceps; or if no efforts of that kind have been used, because by the touch he had learned that no such endeavours would succeed, as in the case of a large hydrocephalus, when the bones of the cranium are often separated at a great distance from each other, or upon perceiving that the pelvis was extremely narrow; if, upon these considerations, he hath made no trials in which the parts were opened, let him gradually dilate the os externum and internum, as formerly directed.

## N U M B. II.

**T**HE head is commonly kept down pretty firm, by the strong contraction of the uterus round the child; but should it yield to one side, let it be kept steady by the hand of an assistant, pressing upon the belly of the woman; let him introduce his hand, and press two fingers against one of the sutures of the cranium; then take out his scissars from the place in which they were deposited, and guiding them by the hand and fingers till they reach the hairy scalp, push them gradually into it, until their progress is stopped by the rests.

If the head slips aside in such a manner as that they cannot be pushed into the skull at the suture, they will make their way through the solid bones, if they are moved in a semicircular turn like the motion of boring, and this method continued till you find the point firmly fixed; for if this is not observed, the points slide along the bones.

The scissars ought to be so sharp at the points, as to penetrate the integuments and bones when pushed with a moderate force; but not so keen as to cut the operator's fingers, or the vagina, in introducing them.

The scissars being thus forced into the brain, as far as the rests at the middle of the blades, let them be kept firm in that situation; and the hand that was in the vagina being withdrawn, the operator must take hold of the handles with each hand, and pull them asunder, that the blades may dilate and make a large opening in the skull; then they must be shut, turned, and again pulled asunder, so as to make the incision crucial; by which means the opening will be enlarged, and sufficient room made for the introduction of the fingers: let them be afterwards closed, and introduced even beyond the rests, when they must again be opened, and turned half round from side to side, until the structure of the brains is so effectually destroyed, that it can be evacuated with ease. This operation being performed, let the scissars be shut and withdrawn; but if this instrument will not answer the last purpose, the business may be done by introducing the crotchet within the opening of the skull. The brain being thus destroyed, and the instrument withdrawn, let him introduce his right hand into the vagina, and two fingers into the opening which hath been made, that if any sharp splinters of the bones remain, they may be broken off, and taken out, lest they should injure the woman's vagina, or the operator's own fingers.



## N U M B. III.

**I**F the case be an hydrocephalus, let him fix his fingers on the inside, and his thumb on the outside of the opening, and endeavour to pull along the skull in time of a pain; but if labour is weak, he must desire the woman to assist his endeavours by forcing down; and thus the child is frequently delivered; because, the water being evacuated, the head collapses of course.

## N U M B. IV.

**B**UT when the pelvis is narrow, the head requires much greater force to be brought along, unless the labour-pains are strong enough to press it down, and diminish it by squeezing out the cerebrum; in this case, let the operator withdraw his fingers from the opening, and sliding them along the head, pass the os uteri; then, with his left hand, taking one of the crotchets from the place of its concealment, introduce it along his right hand, with the point towards the child's head, and fix it above the chin in the mouth, back part of the neck, or above the ears, or in any place where it will take firm hold; having fixed the instrument, let him withdraw his right hand, and with it take hold on the end, or handle of the crotchet, then introduce his left to seize the bones at the opening of the skull (as above directed) that the head may be kept steady, and pull along with both hands.

If the head is still retained by the uncommon narrowness of the pelvis, let him introduce his left hand along the opposite side, in order to guide the other crotchet; which being also applied, and locked or joined with its fellow in the manner of the forceps, he must pull with sufficient force, moving from side to side, and as it advances turn the forehead into the hollow of the sacrum, and extract it with the forceps, humouring the shape of the head and pelvis during the operation, which ought to be performed slowly, with great judgment and caution; and from hence it appears absolutely necessary to know how the head presents, in order to judge how the crotchet must be fixed, and the head brought along to the best advantage.

Sometimes, in these cases, when I find that I cannot succeed by pulling at the opening with my fingers, and if the woman has not had strong pains, I introduce the small end of the blunt-hook into the opening, and placing my fingers against the point on the outside of the skull, pull with greater and greater force; but as we can seldom take a firm hold in this manner, if it does not soon answer the purpose, I introduce my fingers, as above, farther, and slide the point up along the outside above the under jaw; and have succeeded several times with this instrument, except when the pelvis was so narrow as to require a greater force, when we must use the others. No doubt it is better first to try the blunt-hook, because the managing the point gives less trouble, and it can be easier introduced with the point to one side. When the instrument is far enough advanced, this point may be turned to the head; and as a very narrow pelvis seldom occurs, the blunt-hook will commonly succeed.

Soon after the second edition of this Treatise was published, I contrived a sheath to cover the sharp point of the curved crotchets, which may be introduced and used in the same manner as the blunt-hook; the sheath may be taken off, or kept on as there is occasion.

If, when the head is delivered in this manner, the body cannot be extracted, on account of its being much swelled, of a monstrous size, or (which

is most commonly the case) the narrowness of the pelvis, let him desist from pulling, lest the head should be separated from the body, and, introducing one hand so as to reach with his fingers to the shoulder-blades or breast, conduct along it one of the crotchets, with the point toward the fœtus, and fix it with a firm application; then withdrawing his hand, employ it in pulling the crotchet, while the other is exerted in the same manner upon the head and neck of the child; if the instrument begins to lose its hold, he must push it farther up, and fixing it again, repeat his efforts, applying it still higher and higher, until the body is extracted.

Some writers direct us to introduce the crotchet within the skull, and, pressing one hand against the point in the outside, pull along. But this is a trifling expedient, and if great force is used, the instrument tears through the thin bones, and hurts the operator's hand, or the woman's vagina, if not both. Whereas, in the other method, there is much more certainty, and a better purchase to force along the head, which collapses, and is diminished as the brain is discharged, and never comes down in a broad flattened form, according to the allegations of some people, whose ideas of these things are imperfect and confused; for, if this were the case, the same would happen when the head is forced down from behind with labour-pains into a narrow pelvis, because the pressure, in both cases, acts in the same direction; whereas we always find, both in the one and the other, that the vertex is protruded in a narrow point, and the whole head squeezed into a longish form.

Although many people have exclaimed against the crotchets as dangerous instruments, from ignorance, want of experience, or a worse principle, as formerly observed; yet I can assure the reader, that I never either tore or hurt the parts of a woman with that instrument. I have indeed several times hurt the inside of my hand by their giving way, till I had recourse to the curve kind, which in many respects have the advantage of the straight; and I am persuaded, if managed as above directed, will never injure the patient.

Indeed, young practitioners, till they are better informed by custom and practice, may, after the head is opened, try to extract it with the small or large forceps; and if it is not very large, or the pelvis very narrow, they may deliver by squeezing and lessening the head; but, in my course of practice, I have been concerned in many cases, where the pelvis was so distorted and narrow, that even after opening the head largely, I have pulled at the bones in time of strong pains, but all to no purpose, although some of them actually came away. Nay, after fixing a crotchet firmly above and near the chin or basis of the skull, and using great force, I have not been able to move the head lower, till at last I have been obliged to introduce the other, and by intervals increase the force of pulling to the utmost of my strength; and before we had the curve crotchet, I have been so fatigued from the straight kind slipping their small hold so often, that I have scarcely been able to move my fingers or arms for many hours after; and if this force had not been used, the mother must have been lost, as well as the child. See collect. xxxi. and tab. xxviii. xxxix.

## C H A P. IV.

*Of Preternatural Labours.*

## S E C T. I.

**P**RETERNATURAL labour, according to the division mentioned, chap. i. sect. v. happens when, instead of the head, some other part of the body presents to the os uteri. It has been thought by some, that all labours in which the forceps and crotchet are used ought to be ranked in this class; because the head is certainly delivered by preternatural means; and that, when the feet or breech present, and the woman is delivered without any other assistance than that of labour-pains, the case ought to be accounted natural. However, this division would embarrass and confuse the young beginners more than the other which I have chosen to follow, namely, that of reckoning by the manner in which the child is delivered, and calling all those births *preternatural* in which the body is delivered before the head. Preternatural labours are more or less difficult according to the presentation of the child, and the contraction of the uterus round its body. The nearer the head and shoulders are to the os internum or lower part of the uterus, the more difficult is the case; whereas, when the head is towards the fundus, and the feet or breech near the os internum, it is more easy to turn and deliver.

To begin with the easiest of these first, it may be proper to divide them into three classes. First, how to manage when the feet, breech, or lower parts present. Secondly, how to behave in violent floodings; and, when the child presents wrong before the membranes are broke, how to save the waters in the uterus, that the fœtus may be the more easily turned; and what method to follow even after the membranes are broke, when all the waters are not evacuated. Thirdly, how to deliver when the uterus is strongly contracted, and the child presenting either with the fore or back parts, and lying in a circular form; or with the shoulders, breast, neck, face, ear, or vertex, and lying in a longish form, with the feet and breech towards the fundus of the womb, which is contracted like a long sheath, close to the body of the fœtus; and when the fore parts of the child lie towards the side, fundus, fore or back part of the uterus. Daventer, who practised at Dort, in Holland, alledges, that preternatural as well as laborious cases proceed from the wrong position of the os and fundus uteri; that if the fundus hangs forwards over the os pubis, the os uteri is turned backwards towards the sacrum; and that, in whatsoever direction the fundus inclines, the os uteri will be always turned to the opposite side. This opinion he grounded upon the supposition that the placenta always adheres to the fundus: but experience shows, that it adheres to different parts of the womb, sometimes even to the inside of the os uteri. For the most part, indeed, the os internum is turned backwards towards the coccyx, being in a straight line with the fundus up to the middle space betwixt the navel and scrobiculus cordis.

Daventer was also of opinion, that if, upon touching, the mouth of the womb was not felt in the middle, the woman ought to be assisted by opening the parts; and if this did not succeed, by turning and delivering by the feet without delay. We sometimes, indeed, meet with pendulous bellies, in which the os uteri is farther back than usual; but even in these cases, when the head is not very large, nor the pelvis narrow, and the patient is vigorous and the labour-pains strong, the woman, with a little patience, is



for the most part safely delivered without any other than common assistance; or should the case prove tedious, she may be assisted in time of pain by introducing one or two fingers into the os uteri, and gradually bringing it more forwards. When the belly is very pendulous, change of position from time to time is of service, especially lying upon her back, with the shoulders low and the breech raised.

In women that are distorted, when one ilium is much lower than the other, the fundus uteri will be turned to the low side; but there the chief difficulty will proceed from the narrowness of the pelvis.

## S E C T. II.

### THE FIRST CLASS OF PRETERRATURAL LABOURS.

WHEN THE FEET, BREECH, OR LOWER PARTS OF THE FŒTUS  
PRESENT, AND THE HEAD, SHOULDERS, AND UPPER PARTS  
ARE TOWARDS THE FUNDUS.

**T**HESE, for the most part, are accounted the easiest, even although the uterus should be strongly contracted round the body of the child, and all the waters discharged.

If the knees or feet of the child present to the os internum, which is not yet sufficiently dilated to allow them and the body to come farther down, or, if the woman is weak, wore out with long labour, or endangered by a flooding, let the operator introduce his hand into the vagina, push up and stretch the os uteri, and bring along the feet; which being extracted, let him wrap a linen cloth round them, and pull until the breech appears on the outside of the os externum. If the face or fore-part is already towards the back of the uterus, let him persist in pulling in the same direction; but if they are towards the os pubis or one side, they must be turned to the back part of the uterus; and as the head does not move round equal with the body, he must make allowance for the difference in turning, by bringing the last a quarter farther than the place at which the head is to be placed; so that the face or forehead which was towards one of the groins, will be forced to the side of the sacrum, where it joins with the ischium. This quarter-turn of the body must be again undone, without affecting the position of the head; a cloth may be wrapped round the breech, for the convenience of holding it more firmly; then placing a thumb along each side of the spine, and with his fingers grasping the belly, let him pull along the body from side to side, with more or less force according to the resistance. When the child is delivered as far as the shoulders, let him slide his hand, flattened (suppose the right if she lies on her back) between its breast and the perinæum, coccyx, and sacrum, of the woman, and introduce the fore or middle finger (or both, if necessary) into the mouth of the fœtus; by which means the chin will be pulled to the breast, and the forehead into the hollow of the sacrum. And this expedient will also raise upward the hind-head, which rests at the os pubis.

When the fore-head is come so low as to protrude the perinæum, if the woman lies on her back, let the operator stand up and pull the body and head of the child upwards, bringing the forehead with a half-round turn from the under part of the os externum, which will thus be defended from laceration. The application of the fingers in the child's mouth will contribute to bring the head out in this manner, prevent the os externum from hitching on the chin, help along the head, and guard the neck from being overstrained; a misfortune which would infallibly happen if the  
forehead

forehead should be detained at the upper part of the sacrum. Nor is there any great force required to obviate this inconvenience, or the least danger of hurting the mouth, if the head is not large: for if the head cannot be brought along with moderate force, and the operator is afraid of injuring or over-straining the lower jaw, let him push his fingers farther up, and press on each side of the nose, or on the inferior edges of the sockets of the eyes. If the legs are come out, and the breech pulled into the vagina, there is no occasion for pushing up to open, but only to pull along and manage as above directed; still remembering to raise the forehead slowly from the perinæum, which may be pressed back with the fingers of his other hand.

In the case of a narrow pelvis, or large head, which cannot be brought along without the risk of over-straining the neck, let him slide up his fingers and hand into the vagina, and bring down one of the child's arms, at the same time pulling the body to the contrary side, by which means the shoulder will be brought lower down: let him run his fingers along the arm, until they reach the elbow, which must be pulled downwards with an half-round turn to the other side, below the breast. This must not be done with a jerk, but slowly and cautiously, in order to prevent the dislocation, bending, or breaking, of the child's arm.

Let him again guide his fingers into the child's mouth, and try if the head will come along; if this will not succeed, let the body be pulled to the other side, so as to bring down the other shoulder; then slide up his left-hand, and, extracting the other arm, endeavour to deliver the head. If one finger of his right-hand be fixed in the child's mouth, let the body rest on that arm; let him place the left-hand above the shoulders, and put a finger on each side of the neck; if the forehead is toward one side at the upper part of the pelvis, let him pull it lower down, and gradually turn it into the hollow of the sacrum; then stand up, and in pulling raise the body so as to bring out the head in an half-round turn, as above directed.

Daventer and others, from a mistaken notion that the chief resistance is at the coccyx or lower part of the pelvis, have directed us to press the shoulders of the child downwards, so as to bring the hindhead first from below the os pubis: not considering that the resistance is occasioned by the thickest part of the head being detained at the upper part of the pelvis, where the lowest vertebra of the loins and the upper part of the sacrum, jut inward; and that, until the forehead hath passed into the hollow of the sacrum, this method cannot succeed. The business, therefore, is to pull upward at the back part of the neck, which rests against the under part of the os pubis; and by this exertion, the forehead, which is high up, will be brought down with a circular turn; after which the head seldom stops, and the same circular motion is still the most proper; though now we can bring out the head the other way, but not before. Sometimes, indeed, I have found Daventer's method succeed better than the other, when the head is low down, and the chief resistance is in the lower parts; but this is very seldom the case; however, when the forehead is hindered from coming down into the lower part of the sacrum by an uncommon shape of the head or pelvis, and we cannot extract it by bringing it out with an half-round turn at the os pubis, we must try to make this turn in the contrary direction; and instead of introducing our fingers into the child's mouth, let the breast of it rest on the palm of your left-hand (the woman being on her back) and placing the right on its shoulders, with

the fingers on each side of the neck, press it downward to the perinæum. In consequence of this pressure, the face and chin being within the perinæum, will move more upward, and the head come out with an half-round turn from below the os pubis : for the centre of motion is now where the fore part of the neck presses at the perinæum ; whereas, in the other method, the back part of the neck is against the lower part of the os pubis, on which the head turns.

If the forehead is not turned to one side, but sticks at the upper part of the sacrum, especially when the pelvis is narrow ; let him endeavour, with his finger in the mouth, to turn it to one side of the jutting-in of the sacrum, because the pelvis is wider at the sides of the brim, and bring it along as before.

If one of the child's arms, instead of being placed along the side of the head, is turned in between the face and sacrum, or between the hindhead and os pubis, the same difficulty of extracting occurs as in a large head or narrow pelvis ; and this position frequently ensues when the fore parts of the child's body are turned from the os pubis down to the sacrum. If they are turned to the left side of the woman, the left-hand and arm are commonly brought in before the face, and *vice versa* ; but in these cases the elbow is for the most part easily come at, because it is low down in the vagina, and then there is a necessity for bringing down one or both arms before the head can be delivered : from whence we may conclude, that those authors are sometimes in the wrong who expressly forbid us to pull down the arms. Indeed, if the pelvis is not narrow, nor the head very large, and the arms lie along the sides of the head, there is seldom occasion to pull them down ; because the pelvis is widest at the sides, and the membranes and ligaments that fill up the space betwixt the sacrum and ischia yield to the pressure, and make room for the passage of the head : but when they are squeezed between the head and the sacrum, ischia, or ossa pubis, and the head sticks in the pelvis, they certainly ought to be brought down ; or even when the head comes along with difficulty. Neither is the alledged contraction of the os internum round the neck of the child so frequent as hath been imagined ; because for the most part the contraction embraces the head and not the neck : but should the neck alone suffer, that inconvenience may be removed by introducing the hand into the vagina, and a finger or two in the child's mouth, or on each side of the nose ; by which means also a sufficient dilatation will be preserved in the os externum, which frequently contracts on the neck as soon as the arms are brought out.

The diameter from the face or forehead to the vertex, being greater than that from the forehead to the back part of the hind-head or neck, when the hindhead rests at the os pubis, and the forehead at the upper part of the sacrum ; the head can seldom be brought down until the operator, by introducing a finger into the mouth, moves the same to the side, brings the chin to the breast, and the forehead into the hollow of the sacrum ; by which means the hindhead is raised and allowed to come along with greater ease ; and in pulling, half the force only is applied to the neck, the other half being exerted upon the head, by the finger which is fixed in the mouth ; so that the forehead is more easily brought out, by pulling upward with the half-round turn from the perinæum. When the operator with his fingers in the child's mouth cannot pull down the forehead into the hollow of the sacrum, let him push the fore-finger of his left-hand betwixt the neck and os pubis, in order to raise the hind head upward ; which being done, the forehead will come



down with less difficulty, especially if he pushes up and pulls down at the same time, or alternately.

If it be discovered by the touch, that the breech presents, that the membranes are not yet broke, the woman is in no danger, the os internum not yet sufficiently dilated, and the labour-pains strong, the operator ought to wait until the membranes, with the waters, are pushed farther down, as in the natural labour; for, as they come down through the os uteri into the vagina, they stretch open the parts contained in the pelvis; and the bulk within the uterus being diminished, it contracts and comes in contact with the body of the child; so that the breech is pushed along by the mechanical force of the abdominal muscles operating upon the womb.

The same consequence will follow, even although the membranes are broke; for the waters lubricate the parts as they flow off, and the breech, if not too large, or the pelvis narrow, is pushed down. In this case, when the nates present equal and fair to the os uteri (as was formerly observed, when treating of the position of the child, book iii. chap. i. sect. 1. it was most probable that one side of the fœtus was toward the fore part, and the other to the back part of the uterus) so it is also reasonable to conclude, that when the breech presents, it lies in the same manner, but that the fore parts of the child are rather turned backward to one side of the vertebræ of the loins; in this position, one hip will present, and the other rest on the os pubis; but when forced along with pains, the last will be gradually moved more and more to the groin of that side, and from thence slip down at the side of the basin; the lower at the same time will be forced to the other, and the hollow betwixt the thighs will rest upon the jutting-in of the os sacrum, and come down in that manner; the thighs on each side, and the back and round part of the breech, passing in below the arch of the os pubis, which is the best position; but if the back of the child is tilted backward, then it will be forced down in the contrary direction, and come along with more difficulty, viz. the thighs to the os pubis, and back to the sacrum. When it is come down to the middle or lower part of the pelvis, let the operator introduce the fore-finger of each hand, along the outside, to the groins, and taking hold, pull gently along during a strong pain.

If the os externum is so contracted that he cannot take sufficient hold, let it be opened slowly, so as to allow his hands to be pushed up with ease; when he has insinuated a finger or two in each groin, let him place his thumbs on the thighs, if they are toward the ossa pubis, so as to obtain a firm hold; then pull along from side to side, and if the back of the child is to the os pubis, continue to assist in this manner, until the body and head are delivered. The legs being commonly stretched up along the belly and breast, when the child is extracted as far as the shoulders, they come out of themselves, or are easily brought down; but if the belly of the child is turned to one side, or to the os pubis, in that case, when the breech is delivered, he ought to turn the belly down to the sacrum, and the back to the os pubis; and that the face may be also turned to the back of the mother, let him remember the quarter extraordinary, which must be again reversed, and then he may pull along and deliver.

If the body cannot be turned until the thighs and legs are brought down, either on account of the bulk, or because the hold on the breech is not sufficient, let him continue to pull along, until the hams appear on the outside of the os externum; then seize one of the knees with his finger and thumb, and extract that leg; and let the other be brought down in the same manner. If he attempts to pull out the legs before the hams arrive at this

place, the thighs are always in danger of being bent or broken. When the legs are delivered, let him wrap a cloth round the breech of the child; and as the body was pulled down almost as far as the breast, before the legs could be brought out, it must be pushed up again to the navel, or above it; because, without this precaution, the shoulders would be so much engaged in the pelvis, that it would be impracticable to make the motions formerly directed, so as to turn the face to the back of the mother; whereas, when the body is pushed up, those turns can be effected with greater ease, because the belly being in the pelvis, it yields easier to the form of the basin. When the face is turned properly down, let him proceed to deliver, as above directed.

If the breech is detained above the pelvis, either by its uncommon magnitude, or the narrowness of the basin; or if one of the nates is pushed in, while the other rests above the os pubis, sacrum, or to either side; if the woman is low and weak, the pains lingering and insufficient to force the child along; or if she is in danger from a violent flooding; in any of these cases, let him (during every pain) gradually open first the os externum, and then the os internum, with his fingers and hand. Having thus gained admission, let him push up the breech to the fore or back part, or to one side of the uterus, that his hand or arm may have room to slide along the fore parts or belly of the child, so as to feel the thighs, that will direct him to the legs, which must be brought down with his fingers, while at the same time he pushes up the hams with his thumb, that in case the legs lie straight up, they may be extracted with more ease by the flexion of the knee, and run the less risk of being bent, broken, or over-strained; for if they are folded downward, they are the more easily brought out.

If the breech be strongly pressed into the upper part of the pelvis, let him also push it upward and to one side, that his hand and arm may have free passage; for the higher the breech is raised out of his way, he will be at more freedom to extract the legs.

If both legs cannot be easily brought down, he may safely deliver with one, of which, taking hold with a linen cloth wrapped round it, let him slide up his other hand into the vagina, and a finger or two into the outside of the groin which is bent; by these means, the hip will come down the easier, and the leg which is already extracted, will not be over-strained by sustaining the whole force of pulling the body along.

If the legs lie towards the left side of the woman, who is laid on her back, the right-hand must be introduced into the uterus; if they lie to her right side, the left-hand will better answer the purpose; and if they are toward her back or belly, either hand may be indifferently used.

In all cases where the breech presents, the safest practice is always to push up and bring down the legs, provided the os uteri is sufficiently dilated, and the waters not wholly discharged. If the waters are evacuated, the uterus strongly contracted around the child, the breech so low as that it cannot be returned, or so small as to come easily along, we ought then to deliver it accordingly; but if so large as neither to be pushed up nor brought along with the assistance of the fingers, let the operator introduce the curved handle of the blunt crotchet into one of the groins, his fingers into the other, and pull very cautiously, in order to prevent a fracture, or dislocation of the thigh-bone, which might otherwise happen from the use of this instrument, the blunt point of which must be sufficiently past the groin. A fillet may also be used for the same purpose.

I have, in the foregoing cases of this section, supposed the woman laid on her back, her legs supported, and breech to the bed-side, this being generally the best position for delivering the body and head. Indeed, when the child is small, she may lie on her side, and the same methods be used in delivering, provided the operator still remembers, that in this position the ilium and ischium of one side are down, and the others up. Besides, when the breech is pushed up, in order to bring down the legs, if they lie forward toward the fore part of the uterus, and the belly is pendulous, he can reach them with the greatest ease when she lies on one side; or, if the resistance is very great, turn her to her knees and elbows, according to Daventer's method; but when the legs are delivered, if the child is large, or the pelvis narrow, she ought to be turned upon her back, because the body and head can be better and more safely delivered by pulling up and down; and in that posture she is also kept more firm, and her thighs less in the operator's way, than when she lies upon her side. See collect. xxxii. and tab. xxix, xxx, xxxv.

### S E C T. III.

#### THE SECOND CLASS OF PRETERNATURAL LABOURS.

WHEN the membranes are broke, but the face, shoulder, or some other part of the child, being pushed into the pelvis, locks up the os internum, so as that a small quantity of the waters hath been discharged, the uterus is kept from contracting strongly round the child, which is therefore more easily turned than it possibly can be when they are all gone.

When, before the membranes are broke, the child is felt through them, presenting wrong; and at the same time the pains push them down so as to dilate the os internum, more or less.

When the woman at any time in the four last months is seized with a violent flooding that cannot be restrained, and unless speedily delivered, must lose her life; if labour-pains cannot be brought on by stretching the parts, delivery must be forced; but if she is in labour, and the membranes have been pushed down with the waters, they may be broke, by which means the flooding is frequently diminished, and the child delivered by the a-bour-pains.

In these three different cases, if we can prevent the strong contraction of the uterus, by keeping up the waters, we can also, for the most part, turn the child with great ease, even in the very worst positions.

### N U M B. I.

IN the first case, let the operator slowly introduce his hand into the vagina, and his fingers between that part of the child which is pushed down, and the os internum. If in so doing, he perceives some of the waters coming along, he must run up his hand as quick as possible into the uterus, betwixt the inside of the membranes and the child's body; the lower part of his arm will then fill up the os externum like a plug, so that no more of the waters can pass. Let him turn the child with its head and shoulders up to the fundus, the breech down to the lower part of the uterus, and the fore parts toward the mother's back. Let the hand be pushed no farther up than the middle of the child's body; because if it is advanced as high as the fundus, it must be withdrawn lower before the child can be turned; and by these means



means the waters will be discharged, and the uterus of consequence contract so as to render the turning more difficult.

### N U M B. II.

**I**N the second case, when the membranes are not broke, and we are certain that the child does not present fair, if the os internum is not sufficiently dilated, and the woman is in no danger, we may let the labour go on until the parts are more stretched; lubricating and extending the os externum, by degrees, during every pain. Then introducing one hand into the vagina, we insinuate it in a flattened form, within the os internum, and push up between the membranes and the uterus, as far as the middle of the womb. Having thus obtained admission, we break the membranes, by grasping and squeezing them with our fingers; slide our hand within them, without moving the arm lower down; then turn and deliver as formerly directed; but if in any of these cases you find the head is large or the pelvis narrow, bring down the head into the natural position, and assist as directed in lingering or laborious cases.

### N U M B. III.

**I**F the woman (in the third case) is attacked with a violent flooding, occasioned by a separation of all or any part of the placenta from the uterus during the last four months of pregnancy, and every method has in vain been tried to lessen and restrain the discharge, according to the directions in book ii. chap. iii. sect. 3. the operator ought to pronounce the case dangerous, and prudently declare to the relations of the patient, that unless she is speedily delivered, both she and the child must perish; observing at the same time, that by immediate delivery they may both be saved; let him also desire the assistance and advice of some person eminent in the profession, for the satisfaction of her friends and the support of his own reputation. When there are no labour-pains, and the mouth of the womb is not dilated, it is sometimes very difficult to deliver, more especially if the os internum is not a little lax, but feels rigid.

If the os uteri is so much contracted that the finger cannot be introduced, some authors have recommended a dilator, by which it may be gradually opened so as to admit a finger or two. Doubtless, some cases may happen in which this may be necessary; though in all those to which I have been called, when there was a necessity for forcing delivery, the mouth of the womb was open enough to receive the tip of my finger, so that by gradual efforts, I could effect a sufficient dilatation; and it is certainly a safer method to dilate with the fingers and hand, than with an instrument.

If in stretching the os internum labour-pains are brought on, let the operator slowly proceed and encourage them; when the mouth of the womb is opened, if the head presents and the pains are strong, by breaking the membranes the flooding will be diminished; but if she floods to such a degree as to be in danger of her life, and the dilatation does not bring on labour, at least not enough for the occasion, she must immediately be delivered in the following manner. But in the first place let her friends be apprised of the danger, and the operator be aware of promising to save either mother or child; for I have known the mother die in a few minutes after delivery, although to all appearance she seemed able to undergo the operation, and the child lost from the head sticking in the pelvis; others, again, who

were apparently much more weak and exhausted, have recovered, and the child hath been saved.

The operator having performed his duty in making the friends acquainted with the situation of the case, must gently open the os externum, by introducing his fingers gradually, turning them half-round and pushing upward; then forming them with the thumb into the figure of a wedge or cone, continue to dilate slowly and by intervals, until his hand is admitted into the vagina; having thus far gained his point, let him insinuate, in the same slow cautious manner, first one, then two fingers into the os internum, which may be dilated so as to admit the other two and the thumb, in the same conical form, which will gradually make way for sliding the hand along between the outside of the membranes and inside of the uterus; then he must manage as directed in the second case. If upon sliding up his hand upon the outside of the membranes, he feels the placenta adhering to that side of the womb, he must either withdraw that hand and introduce the other on the opposite side, or break the membranes at the lower edge of the placenta.

The greatest danger in this case frequently proceeds from the sudden emptying of the uterus and belly; for when labour comes on of itself, or is brought on in a regular manner, and the membranes are broke, the flooding is gradually diminished; and first the child, then the placenta, is delivered by the pains; so that the pressure or resistance is not all at once removed from the belly and uterus of the woman, which have time to contract by degrees; consequently those fainting-fits and convulsions are prevented which often proceed from a sudden removal of that compression under which the circulation was performed.

In order to anticipate these fatal symptoms, I have (sometimes successfully) ordered an assistant to press upon the woman's belly while the uterus was emptying, or, after having broken the membranes, turned up the head to the fundus, and brought down the legs and breech, I withdraw my arm a little to let the waters come off, though I keep my hand in the uterus for a few minutes, and do not extract the legs until I feel the womb close contracted to the child; nay, if the flooding is stopped, or even diminished, I let the child remain in the uterus perhaps ten or fifteen minutes longer, then deliver; and, if the hæmorrhage is stayed, leave the placenta to be expelled by nature. In all these stages, however, when the flooding is violent, we must deliver without loss of time, remembering still the pressure upon the abdomen; for the woman is frequently so very weak, that although labour could be brought on, she would not have strength sufficient to undergo it.

The younger the woman is with child, the greater is the difficulty in opening the os internum; and more so in the first child, especially if she is past the age of thirty-five.

We should never refuse to deliver in these dangerous cases, even though the patient seems almost expiring; for immediately after delivery, the uterus contracts, the mouths of the vessels are shut up, so that the flooding ceases, and she may recover, if she lives five or six hours after the operation. and can be supported by frequent draughts of broth, jelly, caudle, weak cordial, and anodyne medicines, which maintain the circulation and gradually fill the empty vessels.

If, in time of flooding, she is seized with labour-pains, or if, by every now and then stretching with your fingers the os internum, the membranes ought to be broken; so that, some of the waters being discharged, the

uterus

uterus may contract and squeeze down the fœtus. This may be done sooner in those women who have had children formerly, than in such as have been in labour before. If, notwithstanding this expedient, the flooding still continues, and the child is not like to be soon delivered; it must be turned immediately; or, if the head is in the pelvis, be delivered with the forceps, but, if neither of these two methods will succeed, on account of the narrowness of the pelvis or the bigness of the head; this last must be opened and delivered with the crotchet. In all these cases let the parts be dilated slowly and by intervals, in order to prevent laceration. See collect. xxxiii. and tab. ix, x, xi, xii, xxxiv.

#### S E C T. IV.

##### THE THIRD CLASS OF PRETERNATURAL LABOURS.

WE have already observed, that the principal difficulties in turning children and bringing them by the feet, proceeded from the contraction of the uterus and bad position of the fœtus. If the child lies in a round form, whether the fore parts are toward the os internum, or up to the fundus uteri, we can for the most part move it with the hand, so as to turn the head and shoulders to the upper part, and the breech and legs downward; but if the child lies lengthways, the womb being contracted round it like a long sheath; the task is more difficult; especially if the head and shoulders of the child are down at the lowest part of the uterus, with the breech and feet turned up to the fundus.

Before I proceed to the method of delivery in the following cases, it will not be improper to premise, that the woman ought to be laid on her back, her breech upon the side or foot of the bed, a bolster or pillows being laid below the feather-bed or matrafs, in order to raise it so that the breech may be higher than the shoulders; while an assistant sits on each side, to support her legs and thighs, as directed in chap. ii. sect. 1. chap. iii. sect. 3. and one or two more assistants ought to sit behind, or on each side of her shoulders, to keep her firm in that position. The operator ought to avoid all formality in point of dress, and never walk about the room with sleeves and apron; for although such apparatus may be necessary in hospitals, in private practice it conveys a frightful idea to the patient and female spectators; the more genteel and commodious dress is, a loose washing night-gown, which he may always have in readiness to put on when he is going to deliver; his waistcoat ought to be without sleeves, that his arms may have more freedom to slide up and down under cover of the wrapper; and the sleeves of his shirt may be rolled up and pinned to the breast of his waistcoat. In natural labours, the sheet that hangs over the bed-side is sufficient to keep him clean and dry, by being laid in his lap; but in those cases where he is obliged to alter his position, a sheet ought to be tucked round him, or an apron put on, but not before he is about to begin his work. If the patient is laid on a low bed, and he intends to introduce his right-hand, his best and firmest position is to kneel with his left-knee on a cushion, keeping up the right to support his arm; if the left-hand is introduced, the reverse of this disposition must take place; if the bed or couch is high, he ought to stand, but still remember to support the elbow on the knee. These directions, howsoever trivial they may seem to old practitioners, may be serviceable to young beginners.



The hand of the accoucheur, or operator, being introduced into the uterus, if he finds the breech below the head and shoulders, let him search for the legs and bring them down; but if the breech be higher than the upper parts of the child, or equal with them, he must try to turn the head and shoulders to the fundus, and the breech downward, by pulling up the first and pulling down at last; then proceed with delivery as before directed. This is commonly executed with ease, provided some part of the waters still remain in the uterus; but, if the woman has been long in labour, and the waters discharged, the contraction of the womb is so strong, that the child cannot be turned without the exertion of great force frequently repeated. In this case, the easiest method, both for the patient and operator, is to push up the hand gradually on that side to which the legs and thighs are turned; and even after he has reached them, if they are not very high up, let him advance his hand as far as the fundus uteri; he will thus remove the greatest obstacle, by enlarging the cavity of the womb, so as more easily to feel and bring down the legs; then he may push up and pull down, as we have prescribed above. But if the head and shoulders still continue to hinder the breech and body from coming along, and the feet cannot be brought so low as the outside of the os externum, while they are yet in the vagina he may apply a noose upon one or both; for, unless the child is so small that he can turn it round by grasping the body when the head and shoulders are pushed up, and he endeavours to bring down the other parts, they will again return to the same place, and retard delivery; whereas, if he gains a firm hold of the feet, either without the os externum or in the vagina, by means of the noose fixed upon the ancles, he can with the other hand push up the shoulders, and be able in that manner to bring down the breech. He must continue this method of pushing up and pulling down, until the head and shoulders are raised to the fundus uteri: for should he leave off too soon, and withdraw his hand, although the child is extracted as far as the breech, the head is sometimes so pressed down and engaged with the body in the passage, that it cannot be brought down without being torn along with the crotchet; for the breech and part of the body may block up the passage in such a manner, as that the hand cannot be introduced to raise the head.

In all cases, where the accoucheur foresees that great force will be requisite, he ought to save his strength as much as possible, beginning slowly, and resting his hand between whiles during the operation of pushing up and turning the child in the uterus; for if he begins to work in a hurry, and exerts his utmost strength at first, his hands will be so cramped and enervated, that he will be obliged to desist, and give them some respite, so that it may be a long time before he recovers the use of them, and even then they will be so much weakened as to be scarce able to effect delivery, which is thus impeded and delayed.

Those cases are commonly the easiest in which the fore parts present, and the child lies in a round form, across the uterus, or diagonally, when the head or breech is above and over the os pubis, with the legs, arms, or navel-string, or one or all of them, at the upper or lower part of the vagina, or on the outside of the os externum. Those are more difficult in which, though the child lies in the same round or contracted form, the back, shoulders, belly, or breast, are over the os internum; because, if we cannot move the child round, so as to place the head to the fundus, the legs are brought down with much more difficulty than in the other case;

but if the shoulder, breast, neck, ear, face, or crown of the head presents, and the legs and breech are up to the fundus uteri, the case is still more difficult; because, in the other two, the uterus is contracted in a round form, so that the wrong position of the child is more easily altered than in this, when the womb is contracted in a long shape, and sometimes requires vast force to stretch it so as that the head may be raised to the fundus, and the legs and breech brought down.

The crown of the head is the worst part that can present, because in that case the feet and breech are higher, and the uterus of a longer form, than in any other. The presentation of the face is, next to this, attended with the greatest difficulty; but when the neck, shoulder, back, or breast, presents, the head is turned upward, and keeps the lower part of the womb distended; so that, upon stretching the upper part, the child's head is more easily raised to the fundus.

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### N U M B. I.

**W**HEN the fore parts of the child present, if the feet, hands, and navel-string are not detained above the os uteri, some or all of them descend into the vagina, or appear on the outside of the os externum. If one or more of them come down, and the child at the same time lies in a round form across the uterus, let the accoucheur introduce his hand between them and the sacrum, as directed in sect. 3. When it is past the os internum, let it rest a little, while he feels with his fingers the position of the fœtus; if the head and shoulders lie higher than the breech, he must take hold of the legs and bring them down without the os internum; if the breech is detained above the brim of the pelvis, let him slide up the flat of his hand along the buttocks, and pull down the legs with the other hand; by which method the breech is disengaged and forced into the middle of the pelvis. See tab. xxxi.

In most of those cases where the child is pressed in an oval form, if neither the head nor breech present, the head is to one side of the uterus, and the breech to the other; because, as was formerly observed, it is wider from side to side, than from the back to the fore part; and if either the head or breech is over the os pubis, the other is turned off to the side; in moving the head or shoulders to the fundus, they are raised with greater ease along the sides than at the back or fore parts, for the same reasons.

If the head and shoulders lie lower down, so as to hinder the breech from coming along, and the legs from being extracted, let him push up the head and shoulders to the fundus, and pull out the legs; then try, as above directed, to bring in the breech; and if it still sticks above, because the head and shoulders are again forced down by the contraction of the uterus, he must with one hand take hold of the legs that are now without the os externum, and, sliding the other into the uterus, push the head and shoulders again up to the fundus, while at the same time he pulls the legs and breech along with the feet. If the legs cannot be brought farther down than the vagina, because the breech is high up, let him slip a noose over the feet, round the ancles, as before observed; by which he may pull down the lower parts with one hand, while the other is employed in pushing it up, as before. By this double purchase, the child may be turned even in the most difficult cases; but the operator, in pulling, must be aware of overstraining the ligaments of the joints.

If the legs can be extracted through the os externum, let a single cloth, warmed, be wrapped round them, in order to yield a firmer hold to the accoucheur;

accoucheur; but when they can be brought no lower than the neck of the uterus and vagina, he may use one of these following nooses:

Let him take a strong limber fillet, or soft garter, half worn, about one yard and an half in length, and moderately broad and thick; if thick, an eye may be made at one end of it, by doubling two inches and sewing it strongly, and the other end passed through this doubling in order to make the noose, which being mounted upon the thumb and fingers of his hand, must be introduced and gently slipped over the toes and feet of the child, so as to embrace the ancles, and thus applied it must be drawn tight with his other hand.

If the foot or feet should be so slippery that his fingers cannot hold them and work over the noose at the same time, it must be withdrawn and mounted round his hand or wrist; with which hand, when introduced, he may take firm hold of both feet, if they are as far down as the vagina; then with the fingers of his other hand he can slide the noose along the hand and fingers that hold the feet, and fix it round the ancle. But if one foot remains within the uterus, the fingers of his other hand cannot push up the noose far enough to slide it over the ancle; so that he must have recourse to a director like that for polypuses, mounted with the noose, which will push it along the hand and fingers that hold the foot. The noose being thus slipped over the fingers upon the ancle, he must pull the extremity of the fillet, which hath passed the eye at the upper end of the director; and after it is close drawn, bring down the instrument.

Some use a small slender pair of forceps to grasp the ancles and slide the noose along them; others make use of a fillet with a noose upon one end of it, fixed on a hollow tube that carries it up to be slipped over the ancles; and this being done, it is drawn close by pulling the other end of the fillet down through the cavity of the tube; but there is seldom occasion for any of these instruments, because we can for the most part bring the feet down into the vagina.

If the fillet or garter is too narrow or thin, let it be doubled in the middle, and the noose made by passing the two ends through the doubling.

## N U M B. II.

WHEN the belly presents, and the head, shoulders, breech, thighs, and legs, are turned up over the back to the fundus uteri; when the back presents, and all these parts are upward; when the side presents with the head, shoulders, breech, thighs, and legs turned to the side, back, or fore part of the uterus; in all these cases, when the child is pressed into a round or (more properly) an oval figure, it may be for the most part moved round with one hand introduced into the uterus, the head and shoulders pushed to the fundus, and the legs and breech to the os internum; which being effected, the legs are easily brought down. (See tab. xxxii. xxxiii.) But these cases are more or less difficult as the feet are farther up or lower down, because the business is to bring them downward.

When the breast, shoulders, neck, ear, or face, presents to the os internum, the breech, thighs, and legs being toward the fundus, with the fore parts of the foetus turned either to the side, back, or fore part of the woman's belly, and the whole lying in a longish form, the uterus being closely contracted around its body like a sheath (see tab. xxxiv.) let the accoucheur introduce his hand into the vagina, and open the os internum; by pushing up the fingers and hand flattened between the parts that present



sent and the inside of the membranes; and rest his hand in that situation until he can distinguish how the child lies, and form a right judgment how to turn and deliver: for if these circumstances are not maturely considered, he will begin to work in a confused manner, fatigue himself and the patient, and find great difficulty in turning and extracting the child.

If the feet and legs of the *fœtus* lie towards the back, sides, or fundus uteri, the woman ought to be laid on her back, with her breech raised and brought a little over the bed, as formerly observed; because in that position he can more easily reach the feet than in any other.

If they lie toward the fore part of the uterus, especially when the belly is pendulous, she ought to lie upon her side; because in the other posture it is often difficult to turn the hand up to the fore part of the womb; whereas, if she is laid on the left side, the right-hand may be introduced at the upper part and left side of the brim of the pelvis, where it is widest, and then along the fore part of the uterus; by which means the feet are more easily come at. If it is more convenient for the accoucheur to use his left-hand, the patient may be turned on her right side. The only inconvenience attending these positions, is, that the woman cannot be kept so firm and steady, but will be apt to toss about and shrink from the operator; and, besides, there may be a necessity for turning her upon her back, after the body is delivered, before he can extract the head, especially if it be large, or the pelvis narrow.

The situation of the child being known, and the position of the mother adjusted, let the proper hand be introduced, and the first effort always made in pushing the presenting part up toward the fundus, either along the sides, back, or fore part of the uterus, as is most convenient. If this endeavour succeeds, and the breech, thighs, or legs come down, the body may be delivered with ease; but if the head, shoulder, breast, or neck, presents the other parts of the body being stretched up lengthways, and the uterus so strongly contracted around the child that the presenting part cannot be raised up, or, though pushed upward immediately returns before the legs can be properly seized or brought down, the operator ought, in that case, to force up his hand slowly and gradually between the uterus and the child. If the resistance is great, let him rest a little between whiles, in order to save the strength of his hand and arm, as formerly directed; and then proceed with his efforts until he shall advance his hand as far as the feet; for the higher his hand is pushed, the more will the uterus be stretched, and the more room granted for bringing the legs along; and if, in pushing up his hand, the fingers should be entangled in the navel-string or one of the arms, let him bring it a little lower, and pass it up again on the outside of such incumbrance.

The hand being advanced as high as the fundus, let him, after some pause, feel for the breech, and slide his fingers along the thighs in search of the legs and feet; of which taking hold with his whole hand, if possible, let him bring them down either in a straight line or with an half turn; or should the contraction of the uterus be so strong that he cannot take hold of them in that manner, let him seize one or both ancles between his fingers, and pull them along; but if he cannot bring them down to the lower part of the uterus, so as to apply the noose, he must try again to push up the body, in order still more to stretch the uterus, and obtain a freer scope to bring them down lower; then he may apply the noose, and  
turn

turn the child as above directed, until the head and shoulders are raised up to the fundus, and the feet and breech delivered.

If one leg can be brought down, the child being turned, and that member extracted through the os externum, let the accoucheur slide his hand up to fetch the other; but if this cannot be done, he must fix a finger on the outside of the groin of that thigh which is folded up along the belly, and bring along that buttock, as in the breech case, while he pulls with his other hand at the other leg; and, the body being thus advanced, deliver as before directed.

When the shoulder presents, and the arm lies double in the vagina, let him push them both up; but, if this cannot be done, and the hand is prevented from passing along, he must bring down the arm, and hold it with one hand, while the other is introduced; then let go and push up the shoulder, and as the child is turned, and the feet brought down, the arm will for the most part return into the uterus: but, if the arm that is come down be so much swelled, that it is impracticable to introduce the hand so as to turn and deliver the child, he must separate it at the joint of the shoulder, if it be so low down; or at the elbow, if he cannot reach the shoulder. If the limb be much mortified, it may be twisted off; otherwise it may be snipped and separated with the scissors.

If the shoulder, by the imprudence and ignorance of the unskilful, who pull in expectation of delivering in that way, is forced into the vagina, and part of it appears on the outside of the os externum, a vast force is required to return it into the uterus; because in this case, the shoulder, part of the ribs, breast, and side, are already pulled out of the uterus, which must be extended so as not only to receive them again, but also the hand and arm of the accoucheur. If this distension cannot possibly be effected, he must fix a crotchet above the sternum, and turn the child by pushing up the shoulder and pulling down with the crotchet; or slide his fingers to the neck of the child, and with the scissors divide the head from the body; then deliver first the separated head, or bring along the body by pulling at the arm, or, if need be, with the assistance of the crotchet: after the body is delivered, the head must be extracted according to the rules that will be laid down in sect. v.

When the forehead, face, or ear presents, and cannot be altered with the hand into the natural position, or is not advanced to the os externum, so that we can assist with the forceps, the head must be returned, and the child delivered by the feet; but if this cannot be done, and the woman is in imminent danger, recourse must be had to the crotchet.

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#### N U M B. IV.

**I**F the navel-string comes down by the child's head, and the pulsation is felt in the arteries, there is a necessity for turning without loss of time; for, unless the head advances fast and the delivery is quick, the circulation in the vessels will be entirely obstructed, and the child consequently perish. If the head is low in the pelvis, the forceps may be successfully used.

No doubt, if the pelvis is very narrow, or the head too large, it would be wrong to turn; in that case, we ought to try if we can possibly raise the head, so as to reduce the funis above it, and after that let the labour go on. But if the waters are all gone, and a large portion of the funis falls down, it is impossible to raise it, so as to keep it up, even although

we could easily raise the head ; because as one part of the funis is pushed up with the fingers, another part falls down, and evades the reduction ; and to raise it up to the side, and not above the head, will be to no purpose : when a little juts down at the side of the head, our endeavours will for the most part be successful.

### N U M B. V.

THE ancients, as well as some of the moderns, advise, in all cases when the upper parts, such as the shoulders, breast, neck, face, or ear of the child, present, to push them upward, and bring in the head as in the natural way ; observing, that the fœtus ought never to be delivered by the feet, except in the presentation of the lower parts, such as the small of the back, belly, side, breech, or legs. Were it practicable at all times to bring the head into the right position, a great deal of fatigue would be saved to the operator, much pain to the woman, and imminent danger to the child : he therefore ought to attempt this method, and may succeed when he is called before the membranes are broken, and feels, by the touch, that the face, ear, or any of the upper parts, present. In that case, let him open the os externum slowly during every pain ; and when the os internum is sufficiently dilated by the descent of the waters and membranes, let him introduce his hand into the uterus, as directed in sect. iii. betwixt the womb and the membranes, which must be broke ; and if he finds the head so large, or the pelvis so narrow, that it will be difficult to save the child, provided the woman is vigorous and has strong pains, he may with little difficulty bring in the crown of the head, then withdraw his hand ; and, if the pains return and continue, the child has a good chance to be delivered alive. (See chap. ii. sect. iii. No. 3.) Even after the membranes are broke, if the presenting part hath so locked up the os. internum as to detain some portion of the waters (a circumstance easily known in pushing up the part that presents) he may easily run up his hand speedily to keep them from being discharged, and act in the same manner ; but if the child is not large, nor the pelvis narrow, it were pity, while his hand is in the uterus, to desist from turning the child and bringing it by the feet ; because in that case, we may be pretty certain of saving it. Besides, after the head is brought into the right position, should the pains go off entirely (and this frequently happens) or a flooding comes on in consequence of the force which hath been exerted, he will find great difficulty in turning after the waters have been discharged ; for it is harder to turn when the vertex presents, than in any other position ; whereas, in the case of a large head or narrow pelvis, when the head is forced down by the labour-pains, and will not farther advance, the child may be saved by the forceps ; nay, though the pains do not act so as to force it down to be delivered either by the forceps or in the natural way, the head may be opened and extracted with the crotchet, which is the last resource.

But this necessity seldom occurs, because the cases in which we are most commonly called are after the membranes have been long broken, the waters discharged, and the uterus strongly contracted round the body of the child, which it confines, as it were, in a mould ; so that I have frequently tried in vain to bring the head into the natural position ; for this cannot be effected without first pushing up the part that presents, for which purpose great force is required ; and as one hand only can be introduced, when



when the operator endeavours to bring in the head, the pushing force is abated, to allow the pulling force to act; and the parts that hindered the head from presenting are again forced down; besides, the head is so large and slippery, that he can obtain no firm hold. He might, indeed, by introducing a finger into the mouth, lay hold of the under jaw, and bring in the face, provided the shoulder presents; but instead of amending, this would make the case worse, unless the child be very small; yet, granting the head could be brought into the natural position, the force necessarily exerted for this purpose would produce a flooding, which commonly weakens the patient and carries off the pains; and after all, he must turn with less advantage; and if that cannot be performed when the head is brought in, he must have recourse to the last and most disagreeable method; whereas, when any other part presents, we can always turn the child, and deliver it by the feet. This we cannot promise after the head is brought in; and when once the operator's hand is in the uterus, he ought not to run such risks.

When I first began to practise, I frequently endeavoured to adjust the position of the head in this manner; but meeting with those insuperable difficulties I have mentioned, I adhered to that method which I have always found certain and safe. I have likewise used the *impellens* of Albucasis, in order to keep up the shoulders or body until I could bring in the head; but the contraction was always so great, that the instrument slipped, and was in danger of hurting the uterus. Indeed, when the ear, forehead, or the fontanel, presented, I have, by pushing up, found the head come into the right position; I have likewise, when the forehead was toward the groin or side of the pelvis, moved it more backwards, by which means the forceps were fixed with more ease; but I have much oftener failed, by the head returning to its former situation,

The child is often in danger, and sometimes lost, when the breech presents and is low down in the pelvis, provided the thighs are so strongly pressed against the funis and belly as to stop the circulation in the rope; as also when the child is detained by the head after the body is delivered; in both cases the danger must be obviated by an expeditious delivery; and if the body is entangled in the navel-string, it must be disengaged as well as possible, especially when the funis happens to be between the thighs. As I have before observed, many of these minute directions, in laborious and preternatural cases, may be thought idle and trifling by those practitioners who, without minding any stated rules, introduce the forceps, and taking hold on the head at random, deliver with force and violence; and who, in preternatural deliveries, thrust up their hands into the uterus, and, without considering the position, search for the feet, pull them down, and deliver in a hurry. Such practice may sometimes succeed; but will often destroy the child, and bruise and injure the parts of the mother, even to the hazard of her life. See collect. xxxiv.

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#### S E C T. V. N U M B. I.

THE legs and breech of the child being brought down, and the body properly turned with the fore parts to the mother's back, let the accoucheur endeavour to bring it along; but if it is detained by the size of the belly, distended with air or water (a case that frequently happens when the child has been dead for several days) let the belly be opened, by

by forcing into it the points of his scissars; or he may tear it open with the sharp crotchet.

The body of the child being delivered, the arms brought down, and every method hitherto directed unsuccessfully used for the extraction of the head, which is detained by being naturally too large, over-ossified, or drop-sical, or from narrowness and distortion of the pelvis; if the belly was not opened, and the child is found to be alive by the motion of the heart, or pulsation of the arteries in the funis, the forceps ought to be tried (see tab. xxxv.); but if he finds it impracticable to deliver the head so as to save the life of the child, he must, according to some, force the points of the scissars through the lower part of the occipital bone, or through the foramen magnum; then dilate the blades so as to enlarge the opening, and introduce a blunt or sharp hook. This operation rarely succeeds when the head is over-ossified; but may answer the purpose when the bones are soft and yielding, or in the case of an hydrocephalus; because in the first the aperture may sometimes be enlarged, and in the other the water will be evacuated so as to diminish the bulk of the head, which will of consequence come along with more ease.

Some recommend an instrument to perforate the skull, with double points curved and joined together; which, when pushed into the foramen, are separated, and take hold of the inside; but as the opening with the scissars and introducing the blunt-hook as above, will answer the same end, it is needless to multiply instruments, especially as this method is not so certain as the following:

If, notwithstanding these endeavours, the head cannot be extracted, let the operator introduce his hand along the head, and his fingers through the os uteri; then slide up one of the curved crotchets along the ear, betwixt his hand and the child's head, upon the upper part of which it must be fixed; this being done, let him withdraw his hand, take hold of the instrument with one hand, turning the curve of it over the forehead, and with the other grasp the neck and shoulders, then pull along. The crotchet being thus fixed on the upper part, where the bones are thin and yielding, makes a large opening, through which the contents of the skull are emptied; the head collapsing, is with more certainty extracted, and the instrument hath a firm hold to the last, at the forehead, os petrosum, and basis of the skull.

In introducing the crotchet, let the operator remember the caution given in chap. iii. sect. 5. He must not begin to pull until he is certain that the point of the instrument is properly fixed near the vertex; and he must keep the handle back to the perinæum.

The excellency of Mesnard's contrivance is more conspicuous here than when the head presents; because the curvature of the crotchet allows the point to be fixed on the upper part of the skull, which is to be torn open; and in pulling, the contents are evacuated, and the head is lessened. By these means the principal obstruction is removed; whereas the straight crotchets take so slight a hold, and slip so often, that several times I have been very much fatigued before I could effect the delivery; but have always succeeded to my satisfaction since I adopted the other kind. See collect. xxxv. and tab. xxxix.

If one crotchet be found insufficient, let him introduce the other in the same manner along the opposite side, lock and join them together, and pull along, moving and turning the head so as to humour the shape of the pelvis. This method seldom fails to accomplish his aim, though sometimes very great

great force is required; in which case he must pull with leisure and caution.

## N U M B. II.

**I**F all the expedients should fail, by reason of the extraordinary ossification or size of the head, or the narrowness and distortion of the pelvis, after having used the crotchet without success, he must separate the body from the head with a bistory or pair of scissors; then, pushing up the head into the uterus, turn the face to the fundus, and the vertex down to the os internum and brim of the pelvis; let him direct an assistant to press upon the woman's belly with both hands, in order to keep the uterus and head firm in that position; then open the skull with the scissors, destroy the structure of the brain, and extract with the crotchets, as directed in chap. iii. sect. 5.

The head is sometimes left in the uterus by those practitioners who (not knowing how to turn the the fore parts and face of the child toward the back part of the uterus, or how to bring it along although it presented in that position) pull at random with all their strength, so that the neck is stretched and separated, and the head left behind. This may also happen to an expert accoucheur, when the child hath been dead for many days, and the body is much mortified, even though he hath used all the necessary precautions.

In such a case, provided the head is not very large, nor the pelvis narrow, and the forehead is toward the sacrum, let him slide up his hand along the back part of the pelvis, and, introducing two fingers into the mouth with the thumb below the chin, try to pull the forehead into the hollow of the sacrum; if it sticks at the jutting-in of that bone, he must endeavour to move it first to one side and then to the other. If the head is small, it will come along; if any fragment of the neck remains, or any part of the loose skin, he may lay hold of it, and assist delivery by pulling at it with his other hand; if the head is low down, it may be extracted with the forceps.

Should all these materials fail, let him push up his hand along the side of the head, until it shall have passed the os internum; with the other hand let him introduce one of the curved crotchets, and fix it upon the upper part of the head; then withdrawing the hand which was introduced, take hold of the instrument, and sliding the fingers of the other hand into the mouth, he must pull down with both as above directed. If the head is not over-ossified, the crotchet will tear open the skull, and the bulk being of consequence diminished, the whole may be brought along, even in a narrow pelvis; but if it cannot be moved even by this expedient, he must introduce the other crotchet along the other side of the head, and fixing it upon the skull, lock them together; then, in pulling, turn the forehead down into the hollow of the sacrum, and extract with an half-round turn upward, as when delivering with the forceps.

If the forehead is toward the os pubis, and cannot be brought into the right position, let him with his hand push up the head into the uterus, turn the forehead from the anterior to the side or back part of it, and try to extract as before. If the child hath been dead some time, and is much mortified, he must pull cautiously at the under jaw, because, should that give way, he will have no other hold for pulling or keeping the head steady; when he attempts to extract with one crotchet.



When the head is so large, or the pelvis so narrow, that none of these methods will succeed, let him push up, and, turning the upper parts downward, direct an assistant to press the patient's belly with both hands, moving them from side to side, and squeezing in such a direction, as will force the head toward the os internum, and retain it firmly in that position; then it must be opened and extracted, according to the directions given in chap. iii. sect. vii. numb. ii.

Although by these methods I have succeeded in a few cases of this kind, which have happened in my practice, yet as great difficulties may occur from inflammations of the pudenda, contraction of the uterus, slippiness or largeness of the head, and the narrowness of the pelvis, it will not be improper to inform the reader of other methods that appear to me useful, particularly when the parts are much contracted and swelled. Let the hand be introduced into the vagina, and if it cannot be admitted within the uterus, the fingers being insinuated, may move the head so as to raise the face and chin to the fundus, the vertex being turned to the os internum, and the forehead toward the side of the sacrum. This being effected, let the operator slide up along one ear a blade of the long forceps, which are curved to the side (see tab. xvii. xxxv.); then change hands, and send up the other blade along the opposite ear; when they are locked and the handles secured by a fillet, he must pull the head as low as it will come; then putting them into the hands of an assistant, who will keep them in that position, let him make a large opening with the scissors, squeeze the head with great force, and extract slowly and by degrees.

There is an old instrument with two sides which turn on a pivot, formerly recommended in this case, and since improved, with the addition of another side, by Mr. Leveret, who gives it the denomination of *tire-tete*: but as I thought the contrivance was too complex, and the blades too much confined to a circular motion, I have altered the form of it in a manner that renders it more simple, convenient, and less expensive. Having turned down the vertex as above directed, let this instrument, with the three sides joined together, be introduced along the accoucheur's hand to the upper part of the head, then let the sides or blades be opened with the other hand, so as to inclose the head, moving them circularly and lengthways in a light and easy manner, that they may pass over the inequalities of the scalp, and avoid the resistance of the head and uterus; when they are exactly placed at equal distances from one another, let him join the handles, withdraw his hand, and tying them together with a fillet, pull down, open, and extract, as above directed; and let it be remembered, that the farther the hand can be introduced into the uterus, the more easily will both instruments be managed.

When the pelvis is large, or the head small (in which cases this misfortune seldom happens) without doubt we might succeed with Mauriceau's broad fillet or sling, provided it could be properly applied; but, upon trial, I found my hand so much cramped by the contraction of the uterus, and was so much incommoded by the slippiness of the head, upon which I could not fix it so as to have sufficient hold, that after many fruitless efforts I was obliged to have recourse to the scissors and crotchets as above.

Amand's net is attended with the same difficulties; and rather more troublesome, as it is more compounded; for, when it is mounted on the operator's hand, it will be found scarce practicable to bring over the head the narrow fillet by which it is pulled along, because it commonly slides off from one side or the other.

If the placenta adheres to the uterus, let him first extract the head; if the cake is separated and in his way, let him deliver it before he begins to deliver the head.

When the head is small, or the pelvis large, dilating the foramen magnum with the scissars, and introducing the blunt hook, may be of use either to pull the head along or keep it down, until we can fix the forceps, curve-crotchet, or Leveret's *tire-tete*. See collect. xxxvi.

## C H A P. V.

### *Of Twins.*

#### S E C T. I.

**T**WINS are supposed to be the effect of a double conception in one coition, when two or more ova are impregnated with as many animalcula; which descending from the ovarium, through the Fallopian tube, into the fundus uteri, as they increase, come in contact with that part, and with one another, and are so pressed as to form one globular figure, and stretch the womb into the same form which it assumes when distended by one ovum only; and that, during the whole term of uterine gestation, it is impossible to distinguish twins, either by the figure and magnitude of the uterus, or by the motion of the different fœtuses; for one child, when it is large and surrounded with a great quantity of waters, will sometimes produce as large a prominence (or even larger) in the woman's belly, than is commonly observed when she is big with twins. One child will also, by moving its legs, arms, and other parts of its body against different parts of the uterus, at the same instant or by intervals, yield the same sensation to the mother as may be observed in two or more children; for part of the motion in twins is employed on each other, as well as upon the uterus.

There is therefore no certain method of distinguishing in these cases, until the first child is delivered, and the accoucheur has examined if the placenta is coming along. If this comes of itself, and after its extraction the mouth of the womb be felt contracted, and the operator is unwilling to give unnecessary pain by introducing his hand into the uterus; let him lay his hand upon the woman's abdomen, and if nothing is left in the womb, he will generally feel it, just above the os pubis, contracted into a firm round ball of the size of a child's head, or less; whereas, if there is another child left, the size will be found much larger. If the placenta does not come down before the second child, which is frequently the case, upon examining he will commonly feel the membranes with the waters pushed down through the os uteri; or, if they are broken, the head or some part of the body will be felt. If, therefore, the woman has strong pains, and is in no danger from floodings or weakness, provided the head presents fair, and seems to come along, she will be delivered of this also in the natural way.

If the membranes are not broken, if the head does not immediately follow, or if the child presents wrong, he ought to turn and bring it immediately by the feet, in order to save the patient the fatigue of a second labour, that may prove tedious and even dangerous by enfeebling her too much. Besides, as the parts are fully opened by the first delivery, he can introduce his hand with ease; and as the membranes are for the most part

whole, the waters may be kept up, and the foetus easily turned, as in chap. iv. sect. ii. but if the pelvis is narrow, the woman strong, and the head presents, he ought to leave it to the efforts of nature.

If the first child presents wrong, and in turning that he feels another, he must be aware of breaking the membranes of one while he is at work upon the other; but should they chance to be broke, and the legs of both entangled together (though this is seldom the case, because they are commonly divided by two sets of membranes) let the operator, when he has got hold of two legs, run up his fingers to the breech, and feel if they belong to the same body; and one child being delivered, let the other be turned and brought out in the same manner. If there are more than two, the same method must take place, in extracting one after another.

In case of twins, the placenta of the first seldom comes along until the second child is delivered; but as this does not always happen, he ought, as formerly directed, to certify himself that there is nothing left in the uterus, when the cake comes of itself. Both children being delivered, let him extract both placentas, if they come not of themselves; and if they form distinct cakes, separate first one, then the other; but if they are joined together, forming but one mass, they may be delivered at once, as in chap. ii. sect. vii.

When there are three or four children (a case that rarely happens) the placentas are sometimes distinct, and sometimes altogether form but one round cake; but when this is macerated in water for some days, they, with their several membranes, may be easily separated from one another; for they only adhere in consequence of their long pressure in the uterus, and seldom have any communication of vessels; although such a communication hath lately fallen under my observation. See book i. chap. iii. sect. v.

Twins for the most part lie diagonally in the uterus, one below the other; so that they seldom obstruct one another at the os internum. See collect. xxxvii. and tab. x.

## S E C T. II.

### O F M O N S T E R S.

**T**WO children joined together by their bellies (which is the most common case of monstrous births) or by the sides, or when the belly of the one adheres to the back of the other, having commonly but one funis, are comprehended in this class, and supposed to be the effect of two animalcula impregnating the same ovum, in which they grow together, and are nourished by one navel-string, originally belonging to the secundines; because the vessels pertaining to the coats of the veins and arteries do not anastomose with the vessels belonging to the foetus.

In such a case, where the children were small, the adhesion hath been known to stretch in pulling at the feet of one, so as to be delivered; and the other hath been afterwards brought along in the same manner, without the necessity of a separation.

When the accoucheur is called to a case of this kind, if the children are large; and the woman come to her full time, let him first attempt to deliver them by that method; but if, after the legs and part of the body of the first are brought down, the rest will not follow, let him slide up his hand, and with his fingers examine the adhesion; then introducing the scissars between his hand and the body of the foetus, endeavour to separate them by snip-  
ping



ping through the juncture. Should this attempt fail, he must diminish the bulk in the best manner he can think of, and bring the body of the fœtus, in different pieces, by pulling or cutting them asunder, as he extracts with the help of the crotchet.

No certain rules can be laid down in these cases, which seldom happen; and therefore a great deal must be left to the judgment and sagacity of the operator, who must regulate his conduct according to the circumstances of the case, and according to the directions given for delivering when the pelvis is narrow and the children extraordinary large.

Formerly, practitioners used straight and crooked knives with long handles, which were introduced into the uterus along the hand, in order to cut and divide the bodies of children, that they might be extracted piece-meal; and this cruel practice obtained even in some cases which we can now manage with ease and safety by turning and delivering the fœtus by the feet. But, no doubt, some will happen in which it is impossible to preserve or deliver the children without the help of instruments; and in such an emergency, the scissars are much safer than knives, with which the operator runs the risk of cutting the uterus or himself; whereas he is exposed to no such hazard from the other, which cut only betwixt the points, See collect. xxxviii.

### S E C T. III.

#### OF THE CÆSARIAN OPERATION.

WHEN a woman cannot be delivered by any of the methods hitherto described and recommended in laborious and preternatural labours, on account of the narrowness or distortion of the pelvis, into which it is sometimes impossible to introduce the hand; or from large excrescences and glandular swellings that fill up the vagina, and cannot be removed; or from large cicatrices and adhesions in that part and at the os uteri, which cannot be separated; in such emergencies, if the woman is strong and of a good habit of body, the Cæsarion operation is certainly adviseable, and ought to be performed; because the mother and child have no other chance to be saved, and it is better to have recourse to an operation which hath sometimes succeeded, than leave them both to inevitable death. Nevertheless, if the woman is weak, exhausted with fruitless labour, violent floodings, or any other evacuation which renders her recovery doubtful, even if she were delivered in the natural way; in these circumstances it would be rashness and presumption to attempt an operation of this kind, which ought to be delayed until the woman expires, and then immediately performed with a view to save the child.

The operation hath been performed both in this and the last century, and sometimes with such success, that the mother has recovered, and the child survived. The previous steps to be taken are, to strengthen the patient, if weak, with nourishing broths and cordials; to evacuate the indurated feces with repeated clysters; and if the bladder is distended with urine, to draw it off with a catheter. These precautions being taken, she must be laid on her back, on a couch or bed, her side on which the incision is to be made being raised up by pillows placed below the opposite side: the operation may be performed on either side; though the left is commonly preferred to the right, because in this last the liver extends lower. The apparatus consists of a bistory, probe-scissars, large needles threaded, sponges,

sponges, warm water, pledgets, a large tent or dossil, compresses, and a bandage for the belly.

If the weather is cold, the patient must be kept warm, and no part of the belly uncovered except that on which the incision is to be made; if the operator be a young practitioner, the place may be marked by drawing a line along the middle space between the navel and the os ilium, about six or seven inches in length, slanting forward toward the left groin, and beginning as high as the navel.

According to this direction, let him hold the skin of the abdomen tense between the finger and thumb of one hand, and with the bistory in the other make a longitudinal incision through the cutis to the membrana adiposa, which, with the muscles, must be slowly dissected and separated, until he reaches the peritonæum, which must be divided very cautiously, for fear of wounding the intestines that frequently start up at the sides, especially if the membranes are broken, the waters discharged, and the uterus contracted.

The peritonæum being laid bare, it may be either pinched up by the fingers, or slowly dissected with the bistory, until an opening is made sufficient to admit the fore-finger, which must be introduced as a director for the bistory or scissars in making an effectual dilatation. If the intestines push out, let them be pressed downwards so as that the uterus may come in contact with the opening. If the womb is still distended with the waters, and at some distance from the child, the operator may make upon it a longitudinal incision at once; but if it is contracted close round the body of the fœtus, he must pinch it up, and dilate in the same cautious manner practised upon the peritonæum, taking care to avoid wounding the Fallopian tubes, ligaments, and bladder; then introducing his hand he may take out the child and secundines. If the woman is strong, the uterus immediately contracts, so as that the opening, which at first extended to about six or seven inches, is reduced to two, or less; and in consequence of this contraction, the vessels being shrunk up, a great effusion of blood is prevented.

The coagulated blood being removed, and what is still fluid sponged up, the incision in the abdomen must be stitched with the interrupted suture, and sufficient room left between the last stitch and the lower end of the opening, for the discharge of the moisture and extravasated fluid. The wound may be dressed with dry pledgets or dossils dipped in some liquid balsam, covered with compresses moistened with wine, and a bandage to keep on the dressings and sustain the belly. Some authors observe, that the cutis and muscles only should be taken up in the suture, lest bad symptoms should arise from stitching the peritonæum.

The woman must be kept in bed, as quiet as possible, and every thing administered to promote the lochia, perspiration, and sleep; which will prevent a fever and other dangerous symptoms. If she hath lost a great quantity of blood from the wounds in the uterus and abdomen, so as to be in danger from inanition, broths, caudles, and wine, ought to be given in small quantities, and frequently repeated; and the *cort. Peruvian.* administered in powder, decoction, or extract, may be of great service in this case. For farther information on this subject, the reader may consult Ruffetus, the Memoirs of the Academy of Surgeons at Paris, and Heister's Surgery. See collect. xxxix,

## B O O K IV.

## C H A P. I.

*Of the management of women from the time of their delivery to the end of the month, with the several diseases to which they are subject during that period.*

## S E C T. I.

## OF THE EXTERNAL APPLICATION.

**T**H E woman being delivered of the child and placenta, let a soft linen cloth, warmed, be applied to the external parts; and if she complains much of a smarting soreness, some pomatum may be spread upon it. The linen that was laid below her, to sponge up the discharges, must be removed, and replaced with others that are clean, dry, and warm. Let her lie on her back, with her legs extended close to each other; or upon her side, if she thinks she can lie easier in that position, until she recovers from the fatigue; if she is spent and exhausted, let her take a little warm wine or caudle, or, according to the common custom, some nutmeg and sugar grated together in a spoon: the principal design of administering this powder, which among the good women is seldom neglected, is to supply the want of some cordial draught, when the patient is too weak to be raised, or supposed to be in danger of retchings from her stomach being overloaded. When she hath in some measure recovered her strength and spirits, let the cloths be removed from the parts, and others applied in their room; and if there is a large discharge from the uterus, let the wet linen below her be also shifted, that she may not run the risk of catching cold.

When the patient is either weak or faintish, she ought not to be taken out of bed, or even raised up to have her head and body shifted, until she is a little recruited; otherwise she will be in danger of repeated faintings, attended with convulsions, which sometimes end in death. To prevent these bad consequences, her skirt and petticoats ought to be loosened and pulled down over the legs, and replaced by another, well warmed, with a broad head-band to be slipped in below, and brought up over her thighs and hips; a warm double cloth must be laid on the belly, which is to be surrounded by the head-band of the skirt pinned moderately tight over the cloth, in order to compress the viscera and the relaxed parietes of the abdomen, more or less, as the woman can easily bear it; by which means the uterus is kept firm in the lower part of the abdomen and prevented from rolling from side to side when the patient is turned; but the principal end of this compression is to hinder too great a quantity of blood from rushing into the relaxed vessels of the abdominal contents; especially when the uterus is emptied all on a sudden by a quick delivery. The pressure being thus suddenly removed, the head is all at once robbed of its proportion of blood, and the immediate revulsion precipitates the patient into dangerous lypothemia.



For this reason the belly ought to be firmly compressed by the hands of an assistant, until the bandage is applied; or, in lieu of it, a long towel, sheet, or roller, to make a suitable compression; but for this purpose different methods are used in different countries, or according to the different circumstances of the patients. The head-cloths and shift ought also to be changed, because, with sweating in time of labour, they are rendered wet and disagreeable. Several other applications are necessary when the external or internal parts are rent or inflamed, misfortunes that sometimes happen in laborious and preternatural cases.

The directions for ordering the bed in time of labour, and of the applications after delivery, are absolutely necessary to be known by young practitioners; because all these precautions are for the ease and safety of the patient when attended by inexperienced nurses.

### N U M B. I.

**I**NFLAMMATIONS of the labia pudendi, rectum, urethra, vagina, and uterus, chiefly happen when the head, shoulder, breech, or any other part of the fœtus, hath been forced into the pelvis, and long detained in that situation; so that, by many strong pains, the delivery was effected, or great force and violence were required to turn or extract the child. These inflammations, if slight, are commonly relieved, or altogether resolved, by a plentiful discharge of the lochia, rest, and profuse sweating; but if violent, bleeding, warm fomentations, cataplasms, and emollient clysters, may be necessary; though the first and last must be used with caution.

If the pressure hath been so great as totally to obstruct the circulating fluids in those parts, a mortification ensues; either total, by which the woman is soon destroyed; or partial, when the mortified parts separate and cast off in thick sloughs, then digest, and are healed as a common sore, provided the patient be of a good habit of body; but if the opposite parts are also affected in the same manner, and both sides pressed together (as for example, in the uterus, os internum, vagina, or os externum) or if the internal membrane of the whole inner surface sloughs off, then there is danger of a coalescence, or growing together, by which are formed callosities; and these if they happen in the os internum, vagina, or os externum, will produce difficult and dangerous labours in the next parturition; and if in the uterus, will altogether prevent conception; though this rarely happens, because of the continual draining of the moisture that is discharged from the womb. In order to avoid this mischance, emollient injections ought frequently to be thrown up into the uterus, and large tents or dossils dipped in vulnerary balsams applied in the vagina and os externum.

### N U M B. II.

**I**F, in consequence of the long pressure of the child's head at that part of the vagina where its outward surface is attached to the back and under part of the bladder, the mortification affects the coats of the vesica urinaria, as well as those of the vagina, when the sloughs fall off, the urine will pass that way, and hinder the opening (if large) from being closed; this is an inexpressible inconvenience and misfortune to the poor woman, both from the smell and continual wetting her clothes. The vagina and bladder may also be lacerated by the forceps, crotchet, or any other instrument imprudently forced up; but, in that case, the urine is immediately discharged through

through the wound; whereas in a mortification, it comes off in a natural way, until the slough begins to separate and fall off.

As soon as this misfortune is known, the cure ought to be attempted; this (according to some) consists in keeping a flexible catheter always in the bladder, that the urine may be continually solicited to come through the urethra rather than through the vagina; but if this precaution hath been neglected, and the lips of the ulcer are turned callous, we are directed to pare them off with a curved knife, buttoned at the point, or consume them with lunar caustic; and, if the opening is large, to close it with a double stitch, keeping the flexible catheter in the bladder until it is entirely filled up; but I with this operation may not be found impracticable.

### N U M B: III.

THE os externum is frequently torn, particularly at the perinæum; and sometimes the laceration reaches to the anus. At other times (but more seldom) both vagina and rectum are torn for the space of two or three inches upward, and the two form but one cavity at the lower part. This laceration is frequently occasioned from the excessive largeness of the child's head; from the rigidity of the fibres in women who are near the borders of forty when their first children are born; from the accoucheur's neglecting to slide the perinæum over the head when it is forcibly propelled by the pains, or from his omitting to keep up the head with the flat of his hand that it may not come too suddenly along; from too great violence used in laborious or preternatural labours; and from the operator's incautious manner of thrusting in his hand. If the laceration be small, the part soon heals up, and the only inconvenience attending the wound is a smarting after making water; and when the laceration is large, extending to the edge of the sphincter ani, or even farther, this pain is still more troublesome, and increased upon the least motion by the friction of the lips against each other. This disagreeable rubbing, is (according to some writers) prevented by making two deep stitches that will keep the lips together; but in this case, we can seldom cure by the first intention, on account of the moisture that is continually passing that way, namely the lochia and urine, that insinuate themselves into the wound. Besides, the lips are torn and ragged, and the hold we have is but slender.

In the third case, it is supposed that there is an absolute necessity to make, as soon as possible, two, three, or sometimes four, deep stitches through the torn vagina and rectum, the knots being tied in the vagina; and two more stitches in the perinæum, to assist the re-union of the parts; for if the sphincter ani is entirely separated, and continues in that condition, the patient can seldom retain her excrements for any length of time. If this misfortune should remain unknown, or the operation unperformed, on account of the woman's weakness, until the lips of the wound are grown callous, these callous edges must be pared off with scissars; or, if that should be found impracticable, scarified with the point of a lancet or bistory, and then stitched as above directed; and the stitches must be made very deep, otherwise they will not hold; because there is but little muscular flesh in the vagina and rectum: but the colon ought first to be emptied with clysters, and the patient take little or no solid food, that the stitches may not be over-strained when she goes to stool. When the laceration reaches so high as to endanger the woman's retentive faculty, this

method

method, doubtless, ought to be tried ; but not otherwise, because the operation very rarely succeeds.

When the os internum is tore from the same causes, all that can be done is to keep the patient strictly to the regimen we have directed for women after delivery, and take care that she shall move as little as possible during the first three weeks.

The rents or lacerations that happen to the uterus are of more dangerous consequence, and indeed commonly accounted mortal ; therefore they demand the utmost care and circumspection in all the different cases. If the patient is plethoric, she ought to be bled, in order to prevent a fever, unless she hath undergone a considerable discharge from the uterus ; she ought to be kept very quiet and motionless ; to take nothing but spoon-meat, and even of that a little at a time ; and drink diluting liquors, such as barley-water and very weak broths.

### S E C T. II.

OF AIR, DIET, SLEEPING AND WATCHING, MOTION AND REST, RETENTION AND EXCRETION, AND THE PASSIONS OF THE MIND.

**A**LTHOUGH we cannot remove the patient immediately after delivery into another climate, we can qualify the air, so as to keep it in a moderate and salutary temper, by rendering it warm or cold, moist or dry, according to the circumstances of the occasion. With regard to diet, women in time of labour, and even till the ninth day after delivery, ought to eat little solid food, and none at all during the first five or seven : let them drink plentifully of warm diluting fluids, such as barley-water, gruel, chicken-water, and teas ; caudles are also commonly used, composed of water-gruel boiled up with mace and cinnamon, to which, when strained, is added a third or fourth part of white-wine, or less if the patient drinks plentifully, sweetened with sugar to their taste : this composition is termed *white-caudle* ; whereas, if ale is used instead of wine, it goes under the name of *brown-caudle*. In some countries, eggs are added to both kinds ; but in that case, the woman is not permitted to eat meat or broths till after the fifth or seventh day : in this country, however, as eggs are no part of the ingredients, the patient is indulged with weak broth sooner, and sometimes allowed to eat a little boiled chicken. But all these different preparations are to be prescribed weaker or stronger, with regard to the spices, wine, or ale, according to the different constitutions and situations of different patients ; for example, if she is low and weak, in consequence of an extraordinary discharge of any kind either before or after delivery, or if the weather is cold, the caudles and broths may be made the stronger ; but if she is of a full habit of body, and has the least tendency to a fever, or if the season is excessively hot, these drinks ought to be of a very weak consistence, or the patient restricted to gruel, tea, barley and chicken-water, and these varied according to the emergency of the case.

Her food must be light and easy of digestion, such as panada, biscuit, and sago ; about the fifth or seventh day, she may eat a little boiled chicken, or the lightest kind of young meat ; but these last may be given sooner or later, according to the circumstances of the case and the appetite of the patient. In the regimen, as to eating and drinking, we should rather err on the abstemious side, than indulge the woman with meat and strong fermented liquors, even if these last should be most agreeable to her palate.



palate; for we find by experience, that they are apt to increase or bring on fevers, and that the most nourishing and salutary diet is that which we have above prescribed. Every thing that is difficult of digestion, or quickens the circulating fluids, must of necessity promote a fever; by which the necessary discharges are obstructed, and the patient's life endangered.

As to the article of sleeping and watching, the patient must be kept as free from noise as possible, by covering the floors and stairs with carpets and cloths, oiling the hinges of the doors, silencing the bells, tying up the knockers, and, in noisy streets, strewing the pavement with straw: if, notwithstanding these precautions, she is disturbed, her ears must be stuffed with cotton, and opiates administered to procure sleep; because watching makes her restless, prevents perspiration, and promotes a fever.—Motion and rest are another part of the non-naturals to which we ought to pay particular regard. By tossing about, getting out of bed, or sitting up too long, the perspiration is discouraged and interrupted; and in this last attitude the uterus, not yet fully contracted, hangs down, stretching the ligaments, occasioning pain, cold shiverings, and a fever: for the prevention of these bad symptoms, the patient must be kept quiet in bed till after the fourth or fifth day: and then be gently lifted up in the bed-clothes, in a lying posture, until the bed can be adjusted, into which she must be immediately re-conveyed, there to continue, for the most part, till the ninth day; after which period women are not so subject to fevers as immediately after delivery. Some there are, who, from the nature of their constitutions or other accidents, recover more slowly; and such are to be treated with the same caution after as before the ninth day, as the case seems to indicate. Others get up, walk about, and recover, in a much shorter time; but these may, some time or other, pay dearly for their fool-hardiness, by encouraging dangerous fevers; so that we ought rather to err on the safe side, than run any risk whatsoever.

What next comes under consideration, is the circumstance of retention and excretion. We have formerly observed, that in the time of labour, before the head of the child is locked into the pelvis, if the woman has not had easy passage in her belly that same day, the rectum and colon ought to be emptied by a clyster, which will assist the labour, prevent the disagreeable excretion of the fæces before the child's head, and enable the patient to remain two or three days after without the necessity of going to stool. However, should this precaution be neglected, and the patient very costive after delivery, we must be aware of throwing up stimulating clysters, or administering strong cathartics, lest they should bring on too many loose stools, which, if they cannot be stopped, sometimes produce fatal consequences, by obstructing the perspiration and lochia, and exhausting the woman, so as that she will die all on a sudden; a catastrophe which hath frequently happened from this practice. Wherefore, if it be necessary to empty the intestines, we ought to prescribe nothing but emollient clysters, or some very gentle opener, such as manna, or *elect. lenitivum*.

For the retention of urine that sometimes happens after labour, we have already proposed a remedy in Book II. chap. ii. sect. iii. But no excretion is of more consequence to the patient's recovery than a free perspiration; which is so absolutely necessary, that unless she has a moisture continually on the surface of her body for some days after the birth, she seldom recovers to advantage; her health, therefore, in a great measure depends upon her enjoying undisturbed repose, and a constant breathing

sweat, which prevents a fever, by carrying off the tension, and assists the equal discharge of the lochia; and when these are obstructed, and a fever ensues with pain and restlessness, nothing relieves the patient so effectually as rest and profuse sweating, procured by opiates and sudorifics at the beginning of the complaints; yet these last must be more cautiously prescribed in excessive hot, than in cool weather.

The last of the non-naturals to be considered, are the passions of the mind, which also require particular attention. The patient's imagination must not be disturbed by the news of any extraordinary accident which may have happened to her family or friends; for such information hath been known to carry off the labour-pains entirely, after they were begun, and the woman has sunk under her dejection of spirits; and, even after delivery, these unseasonable communications have produced such an anxiety as obstructed all the necessary excretions, and brought on a violent fever and convulsions, that ended in death.

### S E C T. III.

#### OF VIOLENT FLOODINGS,

ALL women, when the placenta separates, and after it is delivered, lose more or less red blood, from the quantity of half a pound to that of one pound or even two; but should it exceed this proportion, and continue to flow without diminution, the patient is in great danger of her life. This hazardous hæmorrhage is known by the violence of the discharge wetting fresh cloths as fast as they can be applied; from the pulse becoming low and weak, and the countenance turning pale; then the extremities grow cold; she sinks into faintings; and, if the discharge is not speedily stopped or diminished, is seized with convulsions, which often terminate in death.

The dangerous efflux is occasioned by every thing that hinders the emptied uterus from contracting; such as, great weakness and lassitude, in consequence of repeated floodings before delivery; the sudden evacuation of the uterus; sometimes, though seldom, it proceeds from part of the placenta being left in the womb; it may happen when there is another child, or more, still undelivered; when the womb is kept distended with a large quantity of coagulated blood; or when it is inverted by pulling too forcibly at the placenta. See Book II. chap. iii. sect. iii.

In this case, as there is no time to be lost, and internal medicines cannot act so suddenly as to answer the purpose, we must have immediate recourse to external application. If the disorder be owing to weakness, by which the uterus is disabled from contracting itself, so that the mouths of the vessels are left open; or though contracted a little, yet not enough to restrain the hæmorrhage of the thin blood; or if, in separating the placenta, the accoucheur has scratched or tore the inner surface or membrane of the womb; in these cases, such things must be used as will assist the contractile power of the uterus, and hinder the blood from flowing so fast into it and the neighbouring vessels; for this purpose, cloths dipped in any cold astringent fluid, such as oxycrat, or red tart wine, may be applied to the back and belly. Some prescribe venæsection in the arm, to the amount of five or six ounces, with a view of making revulsion; if the pulse is strong, this may be proper; otherwise it will do more harm than good. Others order ligatures, for compressing the returning veins at the hams, arms, and neck, to retain as much blood as possible in the extremities and head. Besides these applications, the vagina may be filled with tow or linen rags

dipped

dipped in the above-mentioned liquids, in which a little alum or *saccharum saturni* hath been dissolved; nay, some practitioners inject proof-spirits warmed, or, soaking them up in a rag or sponge, introduce and squeeze them into the uterus, in order to constrict the vessels.

If the floodings proceed from another child, the retention of the placenta, or coagulated blood, these ought immediately to be extracted, and if there is an inversion of the uterus, it must be speedily reduced. Should the hæmorrhage, by these methods, abate a little, but still continue to flow, though not in such a quantity as to bring on sudden death, some red-wine and jelly ought to be prescribed for the patient, who should take it frequently, and a little at a time, but, above all things, chicken or mutton broths administered in the same manner, for fear of over-loading the weakened stomach, and occasioning retchings; these, repeated in small quantities, will gradually fill the exhausted vessels and keep up the circulation. If the pulse continues strong, it will be proper to order repeated draughts of barley-water, acidulated with elixir of vitriol; but if the circulation be weak and languid, extract of the bark, dissolved in aq. cinnamoni tenuis, and given in small draughts, or exhibited in any other form, will be serviceable; at the same time, lulling the patient to rest with opiates. These, indeed, when the first violence of the flooding is abated, if properly and cautiously used, are generally more effectual than any other medicine.

#### S E C T. IV.

##### OF THE AFTER-PAINS.

**A**FTER-PAINS commonly happen when the fibrous part of the blood is retained in the uterus or vagina, and formed into large clots, which are detained by the sudden contraction of the os internum and externum, after the placenta is delivered; or, if these should be extracted, others will sometimes be formed, though not so large as the first, because the cavity of the womb is continually diminishing after the birth. The uterus, in contracting, presses down these coagulums to the os internum; which being again gradually stretched, produces a degree of labour-pains, owing to irritation of its nerves; in consequence of this uneasiness, the woman squeezes the womb as in real labour; the force being increased, the clots are pushed along, and when they are delivered she grows easy. The larger the quantity is of the coagulated blood, the severer are the pains, and the longer they continue.

Women in the first child, seldom have after-pains; because, after delivery, the womb is supposed to contract, and push off the clots with greater force in the first than in the following labours; after-pains may also proceed from obstructions in the vessels, and irritations at the os internum. In order to prevent or remove these pains, as soon as the placenta is separated and delivered, the hand being introduced into the uterus, may clear off all the coagula. When the womb is felt, through the parietes of the abdomen, larger than usual, it may be taken for granted there either is another child, or a large quantity of this clotted blood; and which soever it may be, there is a necessity for its being extracted. If the placenta comes away of itself, and the after-pains are violent, they may be alleviated and carried off by an opiate: for, by sleeping and sweating plentifully, the irritation is removed, the evacuations are increased, the os uteri is insensibly relaxed, and the coagula slide easily along. When the discharge of the lochia is small, the after-pains, if moderate, ought not to



be restrained; because the squeezing which they occasion, promotes the other evacuation, which is necessary for the recovery of the patient. After-pains may also proceed from an obstruction in some of the vessels, occasioning a small inflammation of the os internum and ligaments; and the squeezing thereby occasioned may not only help to propel the obstructing fluid, but also (if not too violent) contribute to the natural discharges.

## S E C T. V.

### OF THE LOCHIA.

**WE** have already observed, that the delivery of the child and placenta is followed by an efflux of more or less blood, discharged from the uterus, which, by the immediate evacuation of the large vessels, is allowed to contract itself the more freely, without the danger of an inflammation, which would probably happen in the contraction, if the great vessels were not emptied at the same time; but as the fluids in the smaller vessels cannot be so soon evacuated or returned into the vena cava, it is necessary that, after the great discharge is abated, a slow and gradual evacuation should continue, until the womb shall be contracted to near the same size which it had before pregnancy; and to this it attains about the eighteenth or twentieth day after delivery, though the period is different in different women.

When the large vessels are emptied immediately after delivery, the discharge frequently ceases for several hours, until the fluids in the smaller vessels are propelled into the larger, and then begins to flow again of a paler colour.

The red colour of the lochia commonly continues till the fifth day, though it is always turning more and more serous from the beginning; but about the fifth day, it flows of a clear, or sometimes (though seldom) of a greenish tint; for the mouths of the vessels, growing gradually narrower by the contraction of the uterus, at last allow the serous part only to pass. As for the greenish hue, it is supposed to proceed from a dissolution of the cellular or cribriform membrane or mucus that surrounded the surface of the placenta and chorion; part of which, being left in the uterus, becomes livid, decays, and, dissolving, mixes with and tinctures the discharge as it passes along.

Though the lochia, as we have already observed, commonly continue to the eighteenth or twentieth day, they are every day diminishing in quantity, and soonest cease in those women who suckle their children, or have had an extraordinary discharge at first; but the colour, quantity, and duration, differ in different women; in some patients, the red colour disappears on the first or second day; and in others, though rarely, it continues more or less to the end of the month; the evacuation in some is very small, in others excessive; in one woman it ceases very soon; in another, flows during the whole month; yet all of these patients shall do well.

Some alledge, that this discharge from the uterus is the same with that from a wound of a large surface; but it is more reasonable to suppose, that the change of colour and diminution of quantity proceed from the slow contraction of the vessels; because, previous to pus, there must have been lacerations or impostumes; and in women who have suddenly died after delivery, no wound or excoriation hath appeared upon the inner surface of the womb, which is sometimes found altogether smooth, and at other times rough and unequal on that part to which the placenta adhered.

The space that is occupied before delivery, from being six inches in diameter, or eighteen inches in circumference, will, soon after the birth, be contracted to one third or fourth of these dimensions.

## S E C T. VI.

### OF THE MILK-FEVER.

**A**BOUT the fourth day, the breasts generally begin to grow turgid and painful. We have formerly observed, that during the time of uterine gestation the breasts in most women gradually increase till the delivery, growing softer as they are enlarged by the vessels being more and more filled with fluids; and by this gradual distension they are prepared for secreting the milk from the blood after delivery. During the two or three first days after parturition, especially when the woman has undergone a large discharge, the breasts have been sometimes observed to subside and grow flaccid; and about the third or fourth day, when the lochia begin to decrease, the breasts swell again to their former size, and stretch more and more, until the milk, being secreted, is either sucked by the child, or frequently of itself runs out at the nipples.

Most of the complaints incident to women after delivery, proceed either from the obstruction of the lochia in the uterus, or of the milk in the breasts, occasioned by any thing that will produce a fever; such as catching cold, long and severe labour, eating food that is hard of digestion, and drinking fluids that quicken the circulation of the blood in the large vessels; by which means the smaller, with all the secretory and excretory ducts, are obstructed.

The discharge of the lochia being so different in women of different constitutions, and besides in some measure depending upon the method of management and the way of life peculiar to the patient, we are not to judge of her situation from the colour, quantity, and duration of them, but from the other symptoms that attend the discharge; and if the woman seems hearty, and in a fair way of recovery, nothing ought to be done with a view to augment or diminish the evacuation. If the discharge be greater than she can bear, it will be attended with all the symptoms of inanition; but as the lochia seldom flow so violently as to destroy the patient on a sudden, she may be supported by a proper nourishing diet, assisted with cordial and restorative medicines. Let her, for example, use broths, jellies, and asses-milk; if the pulse is languid and sunk, she may take repeated doses of the consec. cardiac. with mixtures composed of the cordial waters and volatile spirits. Substringents and opiates frequently administered, with the cort. Peruv. in different forms, and austere wines, are of great service. On the other hand, when the discharge is too small, or hath ceased altogether, the symptoms are more dangerous, and require the contrary method of cure; for now the business is to remove a too great plentitude of the vessels in and about the uterus, occasioning tension, pain, and labour, in the circulating fluids; from whence proceeds great heat in the part, restlessness, fever, a full hard quick pulse, pains in the head and back, nausea, and difficulty in breathing. These complaints, if not at first prevented, or removed by rest and plentiful sweating, must be treated with venesection and the antiphlogistic method.

When the obstruction is recent, let the patient lie quiet and encourage a copious diaphoresis, by drinking plentifully of warm, weak, diluting fluids, such as water-gruel, barley-water, tea, or weak chicken-broth; the

she may likewise take opiates and sudorifics in different forms as may be agreeable to her stomach.—*Theriaca androm.* from ʒss to ʒi. *Laud. liquid.* from gut. x. to gut. xx. *Pilul. saponac.* from gr. v. to gr. x. or *syr. de meconio.* from ʒss. to ʒi. These may be repeated occasionally, with other forms of opiates; and if they fail to procure rest and sweating, the following diaphoretics, without opium, ought to be administered:

Rx *Pulv. contrayerw. cam.* ʒss. *Pulv. castor. Russ. sal. succin.* āā. gr. v. *Syr. croci.* q. f. f. *Bolus statim sumendus cum haust. sequent. et repetat. quarta vel sexta quaque hora ad tres vices, vel ut opus fuerit.*

Rx *Aq. cinnamom. ten.* ʒiss. cum spiritu. *syr. croci.* āā. ʒii. *adde sal. vol. c. c.* gr. iv. m.

Should these methods be used without success, and the patient, far from being relieved by rest, plentiful sweating, or a sufficient discharge of the obstructed lochia, labour under a hot dry skin, anxiety, and a quick hard and full pulse, the warm diaphoretics must be laid aside; because if they fail of having the desired effect, they must necessarily increase the fever and obstruction, and recourse be had to bleeding at the arm or ankle, to more or less quantity, according to the degree of fever and obstruction; and this evacuation must be repeated as there is occasion. When the obstruction is not total, it is supposed more proper to bleed at the ankle than at the arm; and at this last, when the discharge is altogether stopped. Her ordinary drink ought to be impregnated with nitre, and the following draughts, or others of the same kind, prescribed:

Rx *Sal absynth. ʒi. Succ. limon.* ʒss. *Aq. cinnamom. simp.* ʒss. *Pulv. contrayerw. comp. ʒi. Sacch. alb.* q. f. f. *haustus statim sumendus, et quarta vel sexta quaque hora repetendus.*

If she is costive, emollient and gently-opening clysters may be occasionally injected; and her breasts must be fomented, and sucked either by the mouth or pipe-glasses. If by these means the fever is abated, and the necessary discharges return, the patient commonly recovers; but if the complaints continue, the antiphlogistic method must still be pursued. If notwithstanding these efforts the fever is not diminished or removed by a plentiful discharge of the lochia from the uterus, the milk from the breasts, or by a critical evacuation by sweat, urine, or stool, and the woman is every now and then attacked with cold shiverings, an abscess or abscesses will probably be formed in the uterus or neighbouring parts, or in the breasts; and sometimes the matter will be translated to other situations, and the seat of it foretold from the parts being affected with violent pains; these abscesses are more or less dangerous, according to the place in which they happen, the largeness of the suppuration, and the good or bad constitution of the patient.

If, when the pains in the epigastric region are violent and the fever increased to a very high degree, the patient should all on a sudden enjoy a cessation from pain without any previous discharge or critical eruption, the physician may pronounce that a mortification is begun; especially if at the same time the pulse becomes low, quick, wavering, and intermitting; if the woman's countenance, from being florid, turns dusky and pale, while she herself and all the attendants conceive her much mended, in that case she will grow delirious, and die in a very short time.

What we have said on this subject, regards that fever which proceeds from the obstructed lochia, and in which the breasts may likewise be affected; but the milk-fever is that in which the breasts are originally concerned, and which may happen though the lochia continue to flow in sufficient quantity



quantity ; nevertheless they mutually promote each other, and both are to be treated in the manner already explained ; namely, by opiates, diluents, and diaphoretics in the beginning ; and these prescriptions failing, the obstructions must be resolved by the antiphlogistic method described above. The milk-fever alone, when the uterus is not concerned, is not so dangerous, and much more easily relieved. Women of an healthy constitution, who suckle their own children, have good nipples ; and whose milk comes freely, are seldom or never subject to this disorder, which is more incident to those who do not give suck, and neglect to prevent the secretion in time, or, when the milk is secreted, take no measures for emptying their breasts. This fever likewise happens to women who try too soon to suckle, and continue their efforts too long at one time ; by which means the nipples, and consequently the breasts, are often inflamed, swelled, and obstructed :

In order to prevent too great a turgescency in the vessels of the breasts ; and the secretion of milk, in those women who do not choose to suckle, it will be proper to make external application of those things which, by their pressure and repercussive force, will hinder the blood from flowing in too great quantity to this part, which is now more yielding than at any other time ; for this purpose, let the breasts be covered with *emp. de minio* ; *diapalma*, or *emp. simp.* spread upon linen, or cloths dipped in camphorated spirits, be frequently applied to these parts and the arm-pits ; while the patient's diet and drink are of the lightest kind, and given in small quantities. Notwithstanding these precautions, a turgescency commonly begins about the third day ; but by rest, moderate sweating, and the use of these applications, the tension and pain will subside about the fifth or sixth day, especially if the milk runs out at the nipples ; but if the woman catches cold, or is of a full habit of body, and not very abstemious, the tension and pain increasing, will bring on a cold shivering, succeeded by a fever, which may obstruct the other excretions, as well as those of the breast :

In this case, the sudorifics above recommended must be prescribed ; and if a plentiful sweat ensues, the patient will be relieved ; at the same time the milk must be extracted from her breasts by sucking with the mouth or glasses. Should these methods fail, and the fever increase, she ought to be bled in the arm ; and, instead of the external applications hitherto used, emollient liniments and cataplasms must be substituted, in order to soften and relax. If in spite of these endeavours the fever proceeds for some days, the patient is frequently relieved by critical sweats, a large discharge from the uterus, miliary eruptions, or loose stools mixed with milk, which is curdled in the intestines. But should none of these evacuations happen, and the inflammation continue with increasing violence, there is danger of an impostume, which is to be brought to maturity, and managed like other inflammatory tumours ; and no astringents ought to be applied, lest they should produce scirrhus swellings in the glands.

As the crisis of this fever, as well as of that last described, often consists in miliary eruptions over the whole surface of the body, but particularly on the neck and breasts, by which the fever is carried off, nothing ought to be given which will either greatly increase or diminish the circulating force, but such only as will keep out the eruptions. But if, notwithstanding these eruptions, the fever, instead of abating, is augmented, it will be necessary to diminish its force, and prevent its increase by those evacuations we have mentioned above. On the contrary, should the pulse sink, the eruptions begin to retreat inwardly, and the morbid matter be in danger of falling upon the viscera, we must endeavour

your to keep them out, by such opiates and sudorific medicines as we have already prescribed in obstructions of the lochia; and here blisters may be applied with success. On this subject Sir David Hamilton and Hoffman may be consulted.

### SECTION VII.

#### OF THE PROLAPSUS VAGINÆ, RECTI, ET UTERI

WHEN the head of the child is long retained about the middle of the vagina, the lower part of that sheath sometimes swells; and, as the head comes farther down, is pushed out at the os externum, occasioning great difficulty in delivering the woman: sometimes also the lower part of the rectum is protruded through the sphincter ani, especially if the patient is troubled with the inward piles. The cure of both these complaints consists in reducing the prolapsus: if this cannot be done immediately in the last, on account of the swelling of the protruded part, emollient fomentations and pultices must be used in order to remove the inflammation. When it is reduced, the woman must be confined more than usual to her bed; and if the part falls down again in consequence of her straining at stool or in making water, it must be reduced occasionally, and as she recovers strength the complaint will in all probability vanish; otherwise astringent fumigations or fomentations must be used. If the disorder be of long duration, pessaries, adapted to the part, whether vagina or rectum, must be applied.

A prolapsus uteri may happen from the same causes, or from any thing that will too much relax the ligament and peritonæum, by which the womb is suspended; such as an inveterate fluor albus, that, by its long continuance and great discharge, weakens the womb and all the parts.

This misfortune, when it proceeds from labour, does not appear till after delivery, when the uterus is contracted to its smallest size; nay, not for several weeks or months after that period, until by its weight the os externum is gradually stretched wider and wider, so as to allow the womb to slip through it; and in this case it descends covered with the vagina, that comes down along with it, and hangs between the thighs; though the os tincæ only can be perceived on account of this covering, the shape and substance of the uterus may be easily distinguished.

As this prolapsus comes on gradually, the woman of herself can (for the most part) reduce and keep it up while in bed; but when she rises and walks, it will fall down again. When the complaint is not of long standing, and the womb does not come altogether through the os externum, the patient may be cured by astringent injections; and in the next pregnancy, when the upper part of the uterus is distended so as to fill the pelvis and rise above its brim, the os internum will be raised higher in the vagina; and after delivery, if the woman is confined to her bed for twenty or thirty days, the ligaments generally contract so as to keep up the womb and prevent any future prolapsus. But when the complaint is of long continuance; when the uterus and vagina descend quite through the os externum, and by the friction in walking, occasioned by the vagina rubbing against the thighs and the os uteri upon the cloths that are used for supporting it, an inflammation, excoriation, and ulceration, are produced, inviting a greater flux of fluids to the part; these symptoms, joined with a fluor albus from the inside of the uterus, destroy the hope of a second impregnation, or cure by

by injections; and we can only promise to palliate the disease, by reducing the uterus and keeping it up with a pessary; by which means, used for a length of time, the parts will recover their tone, and the disease be radically cured.

If the uterus be so much inflamed, that it cannot be reduced, generally evacuations must be prescribed, and fomentations and pultices applied in order to diminish its bulk, so as that it may be replaced. For this complaint, different kinds of pessaries have been used; some of a globular form; others that open with a spring, as described in the Medical Essays of Edinburgh; but those most in use are of a flat form, with a little hole in the middle, and made of cork waxed over, ivory, box, ebony, lignum-vitæ, of a triangular, quadrangular, oval, or circular shape. Those that are circular seem best to answer the intention, because we can more easily introduce a large one of that than of any other figure; it lies more commodiously in the vagina; and, as it always tilts a little upward and downward, never hinders the passage of the urine or fæces; these instruments, however, ought to be larger or smaller, according to the laxity or rigidity of the os externum.

There is a pessary lately invented at Paris, which hath an advantage over all others; because the woman can introduce it in the morning, and take it out at night; it is supported and kept in the vagina by a small stalk, the lower end of which forms a little ball that moves in a socket; this socket is furnished with straps, which are tied to a belt that surrounds the patient's body. This pessary is extremely well calculated for those who are in an easy way of life; but the other kind is best adapted to hard-working women, who have not time or conveniency to fix or mend the bandage when it wants repair.

### S E C T. VIII.

OF THE EVACUATIONS NECESSARY AT THE END OF THE MONTH AFTER DELIVERY.

THOSE who have had a sufficient discharge of the lochia, plenty of milk, and suckle their own children, commonly recover with ease; and, as the superfluous fluids of the body are drained off at the nipples, seldom require evacuations at the end of the month: but, if there are any complaints from fulness, such as pains and stitches, after the twentieth day, some blood ought to be taken from the arm, and the belly gently opened by frequent clysters, or repeated doses of laxative medicines.

If the patient has tolerably recovered, the milk having been at first sucked or discharged from the nipples, and afterwards discussed, no evacuations are necessary before the third or fourth week; and sometimes not till after the first flowing of the menses, which commonly happens about the fifth week; if they do not appear within that time, gentle evacuations must be prescribed, to carry off the plethora and bring down the catamenia.



## C H A P. II.

*Of the management of new-born children, with the diseases to which they are subject.*

## S E C T. I.

## OF WASHING AND DRESSING THE CHILD.

**T**HE child being delivered, the navel-string tied and cut, a warm cloth or flannel cap put on its head, and its body wrapped in a warm receiver, it may be given to the nurse or an assistant, in order to be washed clean from that scurf which sometimes covers the whole scarf-skin, and is particularly found upon the hairy scalp, under the arm-pits, and in the groins. This ablution is commonly performed with warm water, mixed with a small quantity of Hungary water, wine, or ale, in which a little pomatum or fresh butter hath been dissolved. This composition cleans all the surface, and the oily part, by mixing with and attenuating the mucus, prepares it for the linen cloth, which dries and wipes off the whole; nevertheless milk and water, or sope and water, are preferable to this mixture.

In laborious or preternatural cases, when considerable force hath been used in delivering the child, the whole body ought to be examined, and if there is any mark or contusion on the head, it will disappear if anointed with pomatum, and gently rubbed or chafed with the accoucheur's hand; if any limb is dislocated or broken, it ought to be reduced immediately; luxations, though they seldom happen, are more incident to the shoulder than to any other part, the humerus being easily dislocated, and as easily reduced. The bones of the arm and thigh are more subject to fracture, than any other of the extremities; the first is easily cured, because the arm can be kept from being moved; but a fracture in the thigh-bone is a much more troublesome case, because, over and above the difficulty of keeping the bones in a proper situation, the part is often necessarily moved in cleaning the child. In this case, the best method is to keep the child lying on one side, after the thigh hath been secured by proper bandage, so that the nurse may change the cloth without moving the part; and to lay it upon bolsters or pillows raised above the wet-nurse, that it may suck with greater freedom; if any of the bones are bent, they may be brought into their proper form by a slow, gentle, and proper extension.

The navel-string must be wrapped in a soft linen rag, and folded up on the belly, over which is to be laid a thick compress, kept moderately tight with a bandage commonly called a *belly-band*. This compression must be continued for some time, in order to prevent an exomphalus, or rupture at the navel; and kept tighter and longer on children that are addicted to crying, than on those that are still and quiet; yet not so tight as to be uneasy to the child, and the bandage must be loosened and the part examined every second day. The navel-string shrinks, dries, and about the sixth or seventh day commonly drops off from the belly; though not at the ligature, as some people have imagined. This being separated, a pledget of dry lint must be applied to the navel, and over it the thick compress and bandage, to be continued several weeks, for the purpose mentioned above.

During

During the time of washing and dressing the child, it ought to be kept moderately warm, especially in the head and breast, that the cold air may not obstruct perspiration; the head and body ought also to be kept tolerably tight with the clothes, for the convenience of handling, and to prevent its catching cold, especially if the child be weakly; but if it be vigorous and full grown, it cannot be too loosely clothed, because the brain, thorax, and abdomen, suffer by too great compression. The clothing of new-born children ought also to be suitable to the season of the year and the nature of the weather; the extremes of cold and heat being avoided, as equally hurtful and dangerous. Instead of the many superfluous inventions of nurses, and those who make clothes for children, with a view to make an expensive and pompous appearance, the dress ought to be contrived with all imaginable simplicity; the child being washed, the navel-string secured, and the head covered with a linen or woollen cap, as already directed, a shirt and waistcoat may be put upon the body, and over it a flannel skirt or petticoat open before, with a broad head-band, as commonly used, or rather a waistcoat joined to it, so as that they can be put on at once; this ought to be rather tied than pinned before; and, instead of two or more blankets, may be covered with a flannel or fustian gown; while the head is accommodated with another cap, adorned with as much finery as the tire-woman shall think proper to bestow.

In short, the principal aim of this point is, to keep the child's head and body neither too tight nor too slovenly, too hot nor too cold; that it may be warm, though not over heated; and easy, though not too loose; that respiration may be full and large, that the brain may suffer no compression, and that, while the child is awake, the legs may be at liberty; to reject all unnecessary rollers, cross-cloths, neck-cloths, and blankets, and to use as few pins as possible, and those that are absolutely necessary with the utmost caution.

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### S E C T. II.

WHEN the child cannot make water, because the passage is filled up with mucus; after having unsuccessfully practised the common methods of holding the belly near the fire, and rubbing the parts with *ol. rutæ*, &c. we must introduce a probe, or very small catheter, along the urethra into the bladder; an operation much more easily performed in female than in male children.

In boys, the prepuce alone is sometimes imperforated; in which case an opening is easily made. But if there is no passage in the urethra, or even through the whole length of the glans, all that can be done is to make an opening with a lancet or bistory, near the mouth or sphincter of the bladder, in the lower part of the urethra, where the urine being obstructed, pushes out the parts in form of a tumour; or, if no such tumefaction appears, to perforate the bladder above the pubes with a trochar; this, however, is a wretched and ineffectual expedient, and the other can but at best lengthen out a miserable life. If the anus is imperforated, and the fæces protrude the parts; or if it be covered with a thin membrane, and a bluish or livid spot appears, the puncture and incision commonly succeed. But when the rectum is altogether wanting, or impervious for a considerable way, the success of the operation is very uncertain; nevertheless it ought to be tried, by making an artificial anus with a bistory, remembering the course of the rectum, and the entry in both sexes. For farther information on this subject,

subject, Mauriceau's and Saviard's Observations, and the Memoirs of the Academy of Surgeons, may be consulted.

In female children there is a thin membrane, in form of a crescent, called the *hymen*, that covers the lower part of the orifice of the vagina, and is rent in the first coition. The middle of it is sometimes attached to the lower part of the meatus urinarius, and on each side of the bridge is a small opening that will only admit the end of a probe, though it is sufficient for the discharge of the menses. This obstruction is commonly unknown till marriage, and hath often proved fatal to the unfortunate woman, who had concealed it through excess of modesty, and afterwards sunk into a deep melancholy which cost her her life, rather than submit to inspection, and the easy cure of having the attachment snipped with a pair of scissars. On this consideration, Saviard advises all accoucheurs to inspect this part in every female child they deliver; and if there should be such a defect, to remedy it during her childhood; or, if the entry is wholly covered with the membrane, let a sufficient perforation be made, which will prevent great pain and tension in their riper years, when the menses, being denied passage, would accumulate every month, and at last push out this and the neighbouring parts, in form of a large tumour, the cause of which is generally unknown until it be opened.

Sometimes a thin membrane, rising from the under part of the mouth, stretches almost to the tip of the tongue, bracing it down, so as to hinder the child from taking hold of the nipple and sucking. This disorder, which is called *tongue-tying*, is easily remedied by introducing the forefinger into the child's mouth, raising up the tongue, and snipping the bridle with a pair of scissars.

If, instead of a thin membrane, the tongue is confined by a thick fleshy substance, the safest method is to direct the nurse to stretch it frequently and gently with her finger; or if it appears like a soft fungus, to touch it frequently but very cautiously with lunar caustic or Roman vitriol; but we ought to take care that we are not deceived by an inflammation that sometimes happens in the birth, from the accoucheur's helping the head along with his finger in the child's mouth.

### S E C T. III.

#### OF MOULD-SHOT HEADS, CONTUSIONS, AND EXCORIATIONS.

**I**N laborious and lingering labours, the child's head is often long confined, and so compressed in the pelvis, that the bones of the upper part of the cranium are squeezed together, and ride over one another in different manners, according as the head presented. If the ossa parietalia rise over the os frontis, the case is called the *mould-shot*; if over the occiput, it goes by the name of the *horse-shoe mould*. When the fontanel presents (though this is seldom the case) and is pushed down, the form of the head is raised up in the shape of an hog's back; whereas, in the former case, the vertex, or crown of the head presented, and the whole was turned from a round to a very long figure. If the head is kept long in the pelvis, and the child not destroyed by the compression of the brain, either before or soon after delivery, it commonly retains more or less of the shape acquired in that situation, according to the strength or weakness of the child. When the bones begin to ride over one another in this manner, the hairy scalp is felt lax and wrinkled; but, by the long pressure and obstructions of the circulating fluids, it gradually swells and forms a large tumour.



In these cases, when the child is delivered, we ought to allow the navel-string, at cutting, to bleed from one to two or three spoonfuls, especially if the infant be vigorous and full grown; and to provoke it by whipping and stimulating; for the more it cries, the sooner and better are the bones of the cranium forced outwards into their natural situation; or, if the head hath not been long compressed, and is not much inflamed, we can sometimes with our hands reduce it into its pristine shape. The meconium ought also to be purged off as soon as possible, to give freer scope to the circulating fluids in the abdomen, and make a revulsion from the surcharged and compressed brain. This may be effected with suppositories, clysters, repeated doses of *ol. amygdal. d.* mixed with *pulv. rhubarb.* or *de albæ,* or *syr. de cichoreo, cum rheo.*

If the child is seized with convulsions soon after delivery, in consequence of this compression, and the vessels of the navel-string have not been allowed to bleed, the jugular vein ought immediately to be opened, and from one to two ounces of blood taken away; an operation easily performed in young children: the urine and meconium must be discharged, and a small blister applied between the scapulæ. When the scalp is bruised, inflamed, or swelled, let it be anointed or embrocated with a mixture of *ol. camamel. acet.* and *spt. vin. camphorat.* and cerates and pulvices applied to the parts.

If the tumefaction is large, and we feel a considerable fluctuation of extravasated fluids, which cannot be taken up by the absorbent vessels, assisted with those applications, the tumour must be opened; though generally there is no occasion for a large incision, because, after the fluid is once discharged, the hollow scalp, by gentle pressure, is more easily joined in children than in older subjects.

When the head is misshapen, it should not be bound or pressed, but left lax and easy; lest, the brain being compressed, convulsions should ensue.

The body of the child is sometimes covered all over with little red spots, called the *red-gum*, and commonly proceeding from the costiveness of the child, when the meconium hath not been sufficiently purged off at first. And here it will not be improper to observe, that as the whole tract of the colon is filled with this viscid excrement, which hath been gradually accumulated for a considerable time; and as the small intestines, stomach, and gullet, are lined with a glary fluid or mucus, the child ought to take no other nourishment than pap as thin as whey, to dilute this fluid; for the first two days; or indeed, till it sucks the mother's milk, which begins to be secreted about the third day, and is at first sufficiently purgative to discharge these humours, and better adapted for the purpose than any artificial purge.

If the mother's milk cannot be had, a nurse lately delivered is to be found; and if the purgative quality of her milk is decreased, she must be ordered to take repeated small doses of manna or lenitive electuary, by which it will recover its former virtue, and the child be sufficiently purged.

If the child is brought up by hand, the food ought to imitate as near as possible the mother's milk; let it consist of loaf-bread and water boiled up together, in form of panada, and mixed with the same quantity of new cow's milk; and sometimes with the broth of fowl or mutton. When the child is costive, two drachms of manna, or from two to four grains of rhubarb, may be given; and when the stools are green and curdled, it will be

be proper to absorb the prevailing acid with the testaceous powders, such as the *chel. cancror. simp.* or *test. oftrear.* given from the quantity of ten grains to a scruple; and for this purpose the *magnesia alba* is recommended, from one to two drachms a day, as being both opening and absorbent. The red-gum may likewise proceed from the officiousness of the nurse, by which the scarf-skin hath been abraded or rubbed off; in which case the child must be bathed in warm milk, and the parts softened with pomatum; the same bath may be also used daily in the other kind, and the belly kept open with the 'fore-mentioned medicines; with which some syrup, tincture, or powder of rhubarb, may be mixed, or given by itself, if the stools are of a greenish hue.

Excoriations behind the ears, in the neck, and groin of the child, are sometimes indeed unavoidable in fat and gross habits; but most commonly proceed from the carelessness of the nurse, who neglects to wash and keep the parts clean; they are, however, easily dried up and healed, with *unguent. alb. pulv. e cerussa*, or fullers-earth. Yet we ought to be cautious in applying drying medicines behind the ears, because a discharge in that part frequently prevents worse diseases.

#### S E C T. IV.

#### OF THE APHTHA.

THE aphtha, or thrush, is a disease to which new-born children are frequently subject, and is often dangerous when neglected at the beginning. This disease proceeds from weakness and laxity of the contracting force of the stomach and intestines, by which the acedent food is not digested; and from a defect in the necessary secretion of bile, with which it ought to be mixed. This prevailing acid in the primæ viæ produces gripings and loose green stools, that weaken the child more and more, deprive it of proper nourishment and rest, and occasion a fever from inanition and irritation. The smallest vessels at the mouths of the excretory ducts in the mouth, gullet, stomach, and intestines, are obstructed and ulcerated in consequence of the child's weakness, and acrimonious vomitings, belchings, and stools, and little foul ulcers are formed.

These first appear in small white specks on the lips, mouth, tongue, and at the fundament: they gradually increase in thickness and extent; adopt a yellow colour, which in the progress of the distemper becomes dusky, and the watery stools (called the *watery gripes*) become more frequent. The whole inner surface of the intestines being thus ulcerated and obstructed, no nourishment enters the lacteal vessels; so that the weakness and disease are increased, the milk and pap which are taken in at the mouth passes off curdled and green, the child is more and more enfeebled, and the brown colour of the aphtha declares a mortification and death at hand. Sometimes, however, the aphthæ are unattended by the watery stools; and sometimes these last are unaccompanied with the aphtha.

In order to prevent this fatal catastrophe, at the first appearance of the disorder we ought to prescribe repeated doses of testaceous powders to absorb and sweeten the predominant acid in the stomach, giving them from ten to twenty grains in the pap, twice or three times a day; and on every third night from three to five grains of the *pulv. rhei. julep. e Creta*; oily and anodyne clysters, with epithems to the stomach, may also be administered. When these and every other prescription fail, the child, if not much weakened,

is sometimes cured by a gentle vomit; consisting of *pulv. ipecacuan.* gr. ʒ. given in a spoonful of barley-water; and repeated two or three times at the interval of half an hour between each. When the child is much enfeebled, the oleo-saccharum cinnamomi or anisi, mixed with the pap, is sometimes serviceable. If the milk is either too purgative or binding, the nurse should be changed, or take proper medicines to alter its quality; or, if the child has been brought up by hand, women's milk may be given on this occasion, together with weak broths; but if the child cannot suck, the milk of cows, mares, or asses, may be substituted in their room, diluted with barley-water.

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### S E C T. V.

#### O F T E E T H I N G.

CHILDREN commonly begin to breed their fore-teeth about the seventh, and sometimes not before the ninth month; nay, in some the period is still later. Those who are healthy and lax in their bellies, undergo dentition easier than such as are of a contrary constitution. When the teeth shoot from their sockets; and their sharp points begin to work their way through the periosteum and gums, they frequently produce great pain and inflammation, which, if they continue violent, bring on feverish symptoms and convulsions, that often prove fatal. In order to prevent these misfortunes, the swelled gum may at first be cut down to the tooth with a bistoury or fleam; by which means the patient is often relieved immediately; but if the child is strong, the pulse quick, the skin hot and dry; bleeding at the jugular will also be necessary, and the belly must be kept open with repeated clysters. On the other hand, if the child is low, sunk, and emaciated, repeated doses of *spt. c. c. tinct. fuligin.* and the like, may be prescribed; and blisters applied to the back, or behind the ears.

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### C H A P. III.

*Of the requisite qualifications of accoucheurs, midwives, nurses who attend lying-in women, and wet and dry nurses for children.*

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### S E C T. I.

#### O F T H E A C C O U C H E U R.

THOSE who intend to practise midwifery ought first of all to make themselves masters of anatomy, and acquire a competent knowledge in surgery and physic, because of their connection with the obstetric art, if not always, at least in many cases. He ought to take the best opportunities he can find of being well instructed; and of practising under a master, before he attempts to deliver by himself.

In order to acquire a more perfect idea of the art, he ought to perform with his own hands upon proper machines, contrived to convey a just notion of all the difficulties to be met with in every kind of labour; by which means he will learn how to use the forceps and crotchets with more dexterity, be accustomed to the turning of children, and consequently be more capable of acquitting himself in troublesome cases that may happen to him



him when he comes to practise among women; he should also embrace every occasion of being present at real labours; and indeed of acquiring every qualification that may be necessary or convenient for him in the future exercise of his profession. But, over and above the advantages of education, he ought to be endowed with a natural sagacity, resolution, and prudence; together with that humanity which adorns the owner, and never fails of being agreeable to the distressed patient; in consequence of this virtue, he will assist the poor as well as the rich, behaving always with charity and compassion. He ought to act and speak with the utmost delicacy of decorum, and never violate the trust reposed in him, so as to harbour the least immoral or indecent design; but demean himself in all respects suitably to the dignity of his profession.

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## S E C T. II.

### O F T H E M I D W I F E.

A MIDWIFE, though she can hardly be supposed mistress of all these qualifications, ought to be a decent sensible woman, of a middle age, able to bear fatigue; she ought to be perfectly well instructed with regard to the bones of the pelvis, with all the contained parts, comprehending those that are subservient to generation; she ought to be well skilled in the method of touching pregnant women, and know in what manner the womb stretches, together with the situation of all the abdominal viscera; she ought to be perfectly mistress of the art of examination in time of labour, together with all the different kinds of labour, whether natural or preternatural, and the methods of delivering the placenta; she ought to live in friendship with other women of the same profession, contending with them in nothing but in knowledge, sobriety, diligence, and patience; she ought to avoid all reflections upon men-practitioners; and when she finds herself at a loss, candidly have recourse to their assistance. On the other hand, this confidence ought to be encouraged by the man, who, when called, instead of openly condemning her method of practice (even though it should be erroneous) ought to make allowance for the weakness of the sex, and rectify what is amiss, without exposing her mistakes. This conduct will as effectually conduce to the welfare of the patient, and operate as a silent rebuke upon the conviction of the midwife, who finding herself so tenderly treated will be more apt to call for necessary assistance on future occasions, and to consider the accoucheur as a man of honour and a real friend. These gentle methods will prevent that mutual calumny and abuse which too often prevail among the male and female practitioners, and redound to the advantage of both; for no accoucheur is so perfect, but that he may err sometimes; and on such occasions he must expect to meet with retaliation from midwives whom he may have roughly used.

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## S E C T. III.

### O F N U R S E S I N G E N E R A L.

NURSES, as well as midwives, ought to be of a middle age, sober, patient, and discreet, able to bear fatigue and watching, free from external deformity, cutaneous eruptions, and inward complaints, that may be troublesome or infectious.

## N U M B. I.

**N**URSES that attend lying-in women ought to have provided, and in order, every thing that may be necessary for the woman, accoucheur, midwife, and child; such as linen and cloths, well aired and warm, for the woman and the bed, which she must know how to prepare when there is occasion; together with nutmeg, sugar, spirit of hartshorn, vinegar, Hungary-water, white or brown caudle ready made, and a clyster-pipe fitted. For the use of the accoucheur, she must hang a doubled sheet over the bed-side, and prepare warm cloths, pomatum, thread, warm and cold water, and two hand-basins; and for dressing the child, she must keep the clothes warm, and in good order. After delivery, her business is to attend the mother and child with the utmost care, and follow the directions given to her relating to the management of each.

That the mother herself should give suck, would certainly be most conducive to her own recovery, as well as to the health of the child; but when this is inconvenient, or impracticable, from her weakness or circumstances in life, a wet-nurse ought to be hired, possessed of the qualifications above described, as well as of those that follow.

## N U M B. II.

**T**HE younger the milk is, the better will it agree with the age of the infant. The nurse is more valuable after having brought forth her second child than after her first; because she is endued with more knowledge and experience touching the management of children. She ought to have good nipples, with a sufficient quantity of good milk: the abundance or scantiness of the secretion may be distinguished by the appearance of her own child; and the quality may be ascertained by examining the milk, which she may be ordered to pour into a wine glass, about two or three hours after she hath eaten and drank, and suckled her own child. If, when falling in a single drop upon the nail, it runs off immediately, the milk is too thin; if the drop stands in a round globe, it is too thick; but when the drop remains in a flattened form, the milk is judged to be of a right consistence; in a word, it may be as well distinguished by its opacity or transparency, when it is dashed upon the side of the glass; besides, it ought to be sweet to the taste, and in colour inclining to blue rather than to yellow. Red-haired women, or such as are very fair and delicate, are commonly objected to in the quality of nurses; but this maxim is not without exceptions; and on this subject Boerhaave's Institutes, with Haller's Commentary, may be consulted.

Although it is certainly most natural for children to suck, it may be sometimes necessary to bring them up by hand; that is, nourish them with pap; because proper wet-nurses cannot always be found, and many children have suffered by sucking diseased women. Some never can be brought to suck, although they have no apparent hindrance; and others are prevented by some swelling or disorder about the mouth or throat.

## N U M B. III.

**U**PON such occasions, we must choose an elderly woman properly qualified for the task, and well accustomed to the duties of a dry-nurse. The food (as we have formerly observed) ought to be light and simple, in quality

quality resembling as nearly as possible the mother's milk, such as thin panada, mixed with cow's milk and sweetened with sugar; or, should the child be costive, instead of sugar, honey or manna may be used. If there is any reason to believe that the loaf-bread or biscuit is made of flour which hath been mixed with alum for the sake of the colour, the common panada ought in this case to be laid aside, in favour of thick water-gruel, mixed with milk, and sweetened as above.

Some children thrive very well on this diet; but when it is neither agreeable to their palates nor nourishing, a wet-nurse must be procured, before the child is too much emaciated and exhausted; and if it can suck, the good effects of the milk will soon be manifest. But, for farther information on this head, the reader may consult Dr. Cadogan's Letter on Nursing of Children.









TABLE II



TABLE I



TABLE III



TABLE IV

# EXPLANATIONS TO PLATES,

OR

## ANATOMICAL TABLES;

WITH AN ABRIDGMENT OF THE  
PRACTICE OF MIDWIFERY,

INTENDED TO ILLUSTRATE

THE TREATISE AND CASES.

### T A B L E I.

**R**EPRESENTS, in a front view, the bones of a well-formed pelvis.—*A.* The five vertebræ of the loins.—*B.* The os sacrum.—*C.* The os coccygis.—*D.* The ossa ilium.—*E.* The ossa ischium.—*F.* The ossa pubis.—*G.* The foramina magna.—*H.* The acetabula.—*I.* The brim of the pelvis, or that circumference of its cavity which is described at the sides by the inferior parts of the ossa ilium, and at the back and fore parts by the superior parts of the ossa pubis and sacrum.

In this table, besides the general structure and figure of the several bones, the dimensions of the brim of the pelvis, and the distance between the under parts of the ossa ischium, are particularly to be attended to; from which it will appear, that the cavity of the brim is commonly wider from side to side, than from the back to the fore part, but that the sides below are in the contrary proportion. The reader, however, ought not from this to conclude, that every pelvis is similar in figure and dimensions, since even well-formed ones differ in some degree from each other. In general, the brim of the pelvis measures about five inches and a quarter from side to side, and four inches and a quarter from the back to the fore part; there being likewise the same distance between the inferior parts of the ossa ischium. All these measures, however, must be understood as taken from the skeleton; for in the subject, the cavity of the pelvis is considerably diminished by its teguments and contents. Correspondent also to this diminution, the usual dimensions of the head of the full-grown fœtus are but three inches and a half from ear to ear, and four inches and a quarter from the fore to the hind head.

*Vide* tab. xvi. xvii. xviii. Also part i. chap. i. sect. i. ii. iii. where the dimensions of the pelvis, as well as of the head of the fœtus, and the manner in which the same is protruded in labour through the bason, are fully treated of. Consult likewise part ii. coll. i. numb. i. ii. where cases are given of complaints of the pelvis arising from difficult labours.

### T A B L E II.

**G**IVES a lateral and internal view of the pelvis, the same being divided longitudinally. *A.* The three lower vertebræ of the loins.—*B.* The os sacrum.—*C.* The os coccygis.—*D.* The left os ilium.—*E.* The left



left os ischium.—*F.* The os pubes of the same side.—*G.* The acute process of the os ischium.—*H.* The foramen magnum.—*I.* The brim of the pelvis.

This plate shews the distance from the superior part of the os sacrum to the ossa pubis, as well as from the last-mentioned bones to the coccyx, which in each amounts to about four inches and a quarter. The depth is likewise shewn of the posterior, lateral, and anterior parts of the pelvis, not in the line of the body, but in that of the pelvis from its brim downward, which is three times deeper on the posterior than anterior part, and twice the depth of the last at the sides.

From this view appears also the angle which is formed by the last vertebra of the loins and the superior part of the os sacrum, as likewise the concavity or hollow space in the posterior internal part of the pelvis, arising from the posterior curvature of the last-mentioned bone and coccyx; finally, the distance from which to the posterior parts of the ossa ischium is here expressed.

*Vide* tab. xvi. xvii. xviii. xix, Also part i. and ii. as referred to in the former table,

### T A B L E III.

**EXHIBITS** a front view of a distorted pelvis.—*A.* The five vertebrae of the loins.—*B.* The os sacrum.—*C.* The os coccygis.—*D.* The ossa ilium.—*E.* The ossa ischium.—*F.* The ossa pubis.—*G.* The foramina magna.—*H.* The acetabula.

From this plate may appear the great danger incident to both mother and child when the pelvis is distorted in this manner; it being only two inches and an half at the brim from the posterior to the anterior part, and the same distance between the inferior parts of each os ischium. *Vide* tab. xxvii, where the pelvis is one quarter of an inch narrower at the brim than this, but sufficiently wide below. Various are the forms of distorted basons, but the last-mentioned is the most common. It is a great happiness, however, in practice, that they are seldom so narrow, though there are instances where they have been much more so. The danger in all such cases must increase or diminish according to the degree of distortion and size of the child's head.

*Vide* part i. book i. chap. i. sect. iv. v. and part ii. collect. i. numb. iii. iv. v. Also collect. xxi. xxvii. and xxix.

### T A B L E IV.

**S H E W S** the external female parts of generation.—*A.* The lower part of the abdomen.—*B.* The labia pudendi separated.—*C.* The clitoris and præputium.—*D.* The nymphae.—*E.* The fossa magna, or os externum.—*F.* The meatus urinarius.—*G.* The frænum labiorum.—*H.* The perinæum.—*I.* The anus.—*K.* The part that covers the extremities of the coccyx.—*L.* The parts that cover the tuberosities of the ossa ischium.

As it is of great consequence to every practitioner in midwifery to know exactly the situation of the parts concerned in parturition, and which have not been accurately described by former anatomists with a view to this particularly branch, I have given this draught from one of the preserved subjects which I keep by me, in order to demonstrate these parts in the ordinary



An anatomical engraving of a human head in profile, facing left. The image shows a cross-section of the head, revealing the internal structures of the ear, throat, and larynx. The ear is labeled with the letter 'H' and the throat area with 'G'. The engraving is signed 'F. 1' in the upper right corner. The style is a detailed line drawing with cross-hatching for shading.

Fig 2



Fig 1



Fig. 2

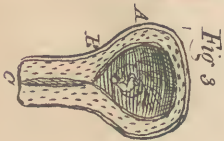


Fig 3



nary course of my lectures. From a view, then, of the situation of the parts, it appears, that the os externum is not placed in the middle of the inferior part of the pelvis, but at the anterior and inferior part of the pubes; and that the labia cover likewise the anterior part of these bones.

Secondly, it may be observed, that as the frænum labiorum, which is nearly adjoining to the inferior part of the ossa pubis, is only about an inch from the anus, between which and the coccyx there is about three inches distance, it follows, that the anus is nearer to the first-mentioned bones than to the latter.

Thirdly, the view of this and the following table will furnish proper hints with respect to the method of touching or examining the os uteri, without hurting or inflaming the parts; as it appears that the os externum is placed forward toward the pubes, and the os uteri backward toward the rectum and coccyx. By this wise mechanism of nature many inconveniences are often prevented, which must happen if these parts were opposite to each other, and situated in the middle of the inferior part of the pelvis; particularly a prolapsus of the vagina and uterus, either in the unimpregnated state or in any of the first four months of pregnancy; as also too sudden deliveries in any of the last months.

Fourthly, from a view of the situation of the parts it will appear, that in labour, when the os uteri is sufficiently opened to allow a passage for the head of the fœtus, the same is protruded to the lower part of the vagina, by which the external parts are pushed out in form of a large tumour, as in tab. xv.

Lastly, it may be observed, that when it is necessary to dilate the os externum, the principal force ought to be applied downward and toward the rectum, to prevent the urethra and neck of the bladder from being hurt or inflamed. See part i. book i. chap. ii. sect. i. Part ii. collect. ii.

#### TABLE V. Fig. 1.

**GIVES** a front view of the uterus in situ suspended in the vagina; the anterior parts of the ossa ischium, with the ossa pubis, pudenda, perinæum, and anus, being removed, in order to shew the internal parts.—*A.* The last vertebra of the loins.—*B.* The ossa ilium.—*C.* The acetabula.—*D.* The inferior and posterior parts of the ossa ischium. *Vide* table xxix. where the ossa pubis and the anterior parts of the ossa ischium are represented by dotted lines.—*E.* The part covering the extremity of the coccyx.—*F.* The inferior part of the rectum.—*G.* The vagina cut open longitudinally, and stretched on each side of the collum uteri, to shew in what manner the uterus is suspended in the same.—*H.* Part of the vesica urinaria stretched on each side of the vagina and inferior part of the fundus uteri.—*I.* The collum uteri.—*K.* The fundus uteri.—*L.* The tubæ Fallopianæ and fimbria.—*M.* The ovaria.—*N.* The ligamenta lata and rotunda.—*O.* The superior part of the rectum.

*Fig. 2.* gives a view of the internal parts as seen from the right groin, the pelvis being divided longitudinally.—*A.* The lowest vertebra of the loins.—*B. C.* The os sacrum and coccyx, with the integuments.—*D.* The left os ilium.—*E.* The inferior part of the left os ischium.—*F.* The os pubis on the same side.—*G.* The foramen magnum.—*H.* The acetabulum.—*I.* The inferior part of the rectum and anus.—*K.* The os externum and vagina; the os uteri lying loosely in the same.—*L.* The vesica urinaria.—*M. N.* The collum and fundus uteri, with a view of the cavity of both. The attachment

attachment of the vagina round the outside of the lips of the mouth of the womb is here likewise shewn, as also the situation of the uterus, as it is pressed downward and backward by the intestines and urinary bladder into the concave and inferior part of the os sacrum.—*O.* The ligamenta lata and rotunda of the left side.—*P.* The Fallopian tube, with the fimbriæ.—*Q.* The ovarium of the same side.—*R.* The superior part of the rectum and inferior part of the colon.

*Fig. 3.* gives a front view of the uterus in the beginning of the first month of pregnancy; the anterior part being removed, that the embryo might appear through the amnios, the chorion being dissected off.—*A.* The fundus uteri.—*B.* The collum uteri, with a view of the rugous canal that leads to the cavity of the fundus.—*C.* The os uteri.

*Vide* part i. book i. chap. ii. sect. ii. iii. Part ii. collect. iii.

### TABLE VI. *Fig. 1.*

**I**N the same view and section of the parts as in the first figure of the former table, shews the uterus as it appears in the second or third month of pregnancy, its anterior part being here likewise removed.—*F.* The anus.—*G.* The vagina, with its plicæ.—*H.* The posterior and inferior part of the urinary bladder extended on each side, the anterior and superior part being removed.—*I.* The mouth and neck of the womb, as raised up when examining the same by the touch, with one of the fingers in the vagina.—*K.* The uterus as stretched in the second or third month, containing the embryo, with the placenta adhering to the fundus.

It appears from this and the former table, that at this time nothing can be known, with respect to pregnancy, from the touch in the vagina, as the resistance of the uterus is so inconsiderable that it cannot prevent its being raised up before the finger; and even were it kept down, the length of the neck would prevent the stretching being perceptible. The uterus likewise not being stretched above the pelvis, little change is made as to the figure of the abdomen, farther than that the intestines are raised a little higher; whence possibly the old observation of the abdomen being a little flatter at this period than usual, from the intestines being pressed more to each side. Women at this period miscarry oftener than at any other. It is a great happiness, however, in practice, that although they are frequently much weakened by large discharges, yet they rarely sink under the same, but are sooner or later relieved by labour coming on, which gradually stretches the neck and mouth of the womb, by the membranes being forced down with the waters; and if the placenta is separated from the internal surface of the uterus, all its contents are discharged; but if the placenta still adheres, the membranes break, the waters and foetus are expelled, and the flooding diminishes, from the uterus contracting close to the secundines, which also are usually discharged sooner or later.

From the structure, finally, of the parts, as represented in this and the former table, it may appear, that it is much safer to restrain the flooding, and support the patient, waiting with patience the efforts of nature, than to endeavour to stretch the os uteri, and deliver either with the hand or instruments, which might endanger a laceration and inflammation of the parts.

*Vide C. in tab. xxxvii. Also part i. book ii. chap. ii. sect. ii. iii. iv. part. ii. collect. xii. numb. ii.*





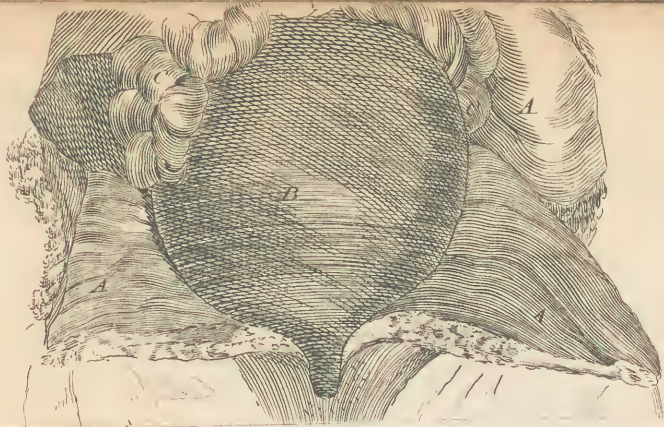


TABLE VII



TABLE VIII



TABLE IX

*Fig. 2.* represents the uterus in the fourth or fifth month of pregnancy, in the same view and section of the parts with the former figure; excepting that in this the anterior part of the collum uteri is not removed.

In the natural situation, the mouth and lips of the womb are covered with the vagina, and these parts are contiguous to each other; but here the vagina *G.* is a little stretched from the neck and lips of the former; in order to shew the parts more distinctly.—*I.* The neck of the womb, which appears in this figure thicker, shorter, and softer, than in the former.—*K.* The inferior part of the fundus uteri; the stretching of which can sometimes be felt through the vagina, by pushing up a finger on the anterior or lateral part of the same.

The uterus now is so largely stretched as to fill all the upper part of the pelvis, and begins also to increase so much as to rest on the brim, and to be supported by the same, the fundus at the same time being raised considerably above the pubes. From the abdomen being now more stretched, the woman is more sensible of her growing bigger; and the uterus also; from the counter-pressure of the contents and parietes of the abdomen, is kept down; and the os uteri prevented from rising before the finger as formerly. In lean women, the stretching of the uterus can sometimes be perceived in the vagina at this period as well as above the pubes; but nothing certain can be discovered from the resistance or feel of the mouth of the womb or lips, which are commonly the same in the first months of pregnancy as before it.

The size or bulk of the foetus is finally here to be observed, with the placenta adhering to the posterior part of the uterus.

*Vide* the references to part i. and ii. in the former table.

#### T A B L E VII.

**R**EPRESENTS the abdomen of a woman opened in the sixth or seventh month of pregnancy.—*A.* The parietes of the abdomen opened, and turned back to shew *B.* The uterus.—*C.* The intestines raised upward.

The labia pudendi are sometimes affected in pregnancy with oedematous swellings, occasioned by the pressure of the uterus upon the returning veins and lymphatics. If the labia are so tumefied as to obstruct the patient's walking, the complaint is removed by puncturing the parts affected. By which means the serous fluid is discharged for the present; but commonly recurs; and the same operation must be repeated several times, perhaps, before delivery; after which, however, the tumefaction entirely subsides. Here it may be observed; that this complaint can seldom or never obstruct delivery, as the labia are situated at the anterior parts of the ossa pubis, and can rarely affect the stretching of the frænum, perinæum, vagina, and rectum. From this figure it appears, that the stretching of the uterus can easily be felt at this period in lean subjects, through the parietes of the abdomen, especially if the intestines do not lie before it. In general indeed, as the uterus stretches, it rises higher; by which means the intestines are likewise raised higher, and are also pressed to each side. Hence the nearer a woman is to her full time, the stretching is the more easily felt.

*Vide* part i. book i. chap. iii. sect. iii. Book iii. chap. i. sect. ii. and part ii. coll. xii. xiii.



## TABLE VIII.

**I**N the same view and section of the parts as in table vi. is represented the uterus of the former table, in order to shew its contents, and the internal parts as they appear in the sixth or seventh month of pregnancy.—*A.* The uterus stretched up to the umbilical region.—*B.* The superior part of the ossa ilium.—*C.* The acetabula.—*D.* The remaining posterior parts of the ossa ischium.—*E.* The anus.—*F.* The vagina.—*G.* The bladder of urine.—*H.* The neck of the womb shorter than in table vi. and raised higher by the stretching of the uterus above the brim of the pelvis.—*I.* The vessels of the uterus larger than in the unimpregnated state.—*K.* The placenta adhering to the inferior and posterior part of the uterus.—*L.* The membranes that surround the fœtus, the head of which is here represented (as well as of those in table vi.) situated downward at the inferior part of the uterus, and which I am apt to believe is the usual situation of the fœtus when at rest, and surrounded with a great quantity of waters, as the head is heavier than any other part. With respect to the situation of the body of the fœtus, though the fore parts are often turned toward the sides and posterior parts of the uterus, they are here, as in the foregoing table, represented at the anterior part, or forward, in order to shew them in a more distinct and picturesque manner.

*Vide* part i. book i. chap. iii. sect. iii. iv. Part ii. collect. xiii. numb. i.

From this table may appear the difficulty of stretching the os uteri in flooding cases, even at this period, from the length and thickness of the neck of the womb, especially in a first pregnancy; much the same method, however, is to be followed here as was directed in table vi. till labour comes on to dilate the os uteri. If the flooding is then considerable, the membranes should be broken, that the uterus may contract, and thereby lessen the discharge. The labour likewise, if it is necessary, may be assisted by dilating the os uteri in time of the pains; which also, if wanting, may be provoked by the same method, when the patient is in danger. If this danger is imminent, and the woman seems ready to expire, the uterus, as appears from this table, is at this time sufficiently stretched to receive the operator's hand to extract the fœtus, if the os internum can be safely dilated.

Lastly, it may be observed, that women are in greater danger in this period and afterwards, than in the former months.

*Vide* part i. book iii. chap. iv. sect. iii. numb. i. ii. iii. Part iii. coll. xxxiii. numb. ii. See also, in the Edinburgh Physical and Literary Observations, art. xviii. the dissection of a woman with child, by Dr. Donald Monro, physician at London.

## TABLE IX.

**I**N the same view and section of the parts with the former, represents the uterus in the eighth or ninth month of pregnancy.—*A.* The uterus as stretched to near its full extent with the waters, and containing the fœtus entangled in the funis, the head presenting at the upper part of the pelvis.—*B.* The superior part of the ossa ilium.—*C.* The acetabula.—*D.* The remaining posterior parts of the ossa ischium.—*E.* The coccyx.—*F.* The inferior part of the rectum. *G.* The vagina stretched on each side. *H.* The os uteri, the lips of which appear larger and softer than in the foregoing table, the neck of the womb being likewise stretched to its full extent, or entirely obliterated.—*I.* Part of the vesica urinaria.—*K.* The placenta







TABLE X



TABLE XI



TABLE XII

placenta at the superior and posterior part of the uterus.—*L.* The membranes.—*M.* The funis umbilicalis.

This and the foregoing table shew in what manner the uterus stretches, and how its neck grows shorter, in the different periods of pregnancy; as also the magnitude of the fœtus, in order more fully to explain part i. book i. chap. iii. sect. iv. v. also book iii. chap. i. sect. i. ii. likewise part ii. coll. xiii. numb. i.

Notwithstanding it has been handed down as an invariable truth, from the earliest accounts of the art to the present times, that when the head of the fœtus presented, the face was turned to the posterior part of the pelvis, yet from Mr. Oald's observation, as well as from some late dissections of the gravid uterus, and what I myself have observed in practice, I am led to believe that the head presents, for the most part, as here delineated, with one ear to the pubes, and the other to the os sacrum; though sometimes this may vary, according to the form of the head, as well as that of the pelvis.

Consult Dr. Hunter's elegant plates of the gravid uterus.

### T A B L E X.

**G**IVES a front view of twins in utero in the beginning of labour; the anterior parts being removed, as in the preceding tables.—*A.* The uterus as stretched with the membranes and waters.—*B.* The superior parts of the ossa ilium.—*C.* The acetabula.—*D.* The ossa ischium.—*E.* The coccyx.—*F.* The lower part of the rectum.—*G.* The vagina.—*H.* The os internum stretched open about a finger's breadth, with the membranes and waters in time of labour-pains.—*I.* The interior part of the uterus stretched with the waters that are below the head of the child that presents.—*K.* The two placentas adhering to the posterior part of the uterus, the two fœtuses lying before them; one with its head in a proper position, at the inferior part of the uterus, and the other situated preternaturally, with the head to the fundus: the bodies of each are here entangled in their proper funis, which frequently happens in the natural as well as preternatural positions.—*L.* The membranes belonging to each placenta.

This representation of twins, according to the order observed in my Treatise of Midwifery, ought to have been placed among my last tables; but as that was of no consequence, I have placed it here, in order to shew the os uteri grown much thinner than in the former figure, a little open and stretched by the waters and membranes which are pushed down before the head of one of the fœtuses in time of a labour-pain. With respect to the position of twins, it is often different in different cases; but was thus in a late dissection of a gravid uterus by Dr. Mackenzie.

*Vide* part i. book iii. chap. i. sect. iv. and chap. v. sect. i. and part ii, coll. xiv. and part iii. coll. xxxvii.

### T A B L E XI.

**E**XHIBITS another front view of the gravid uterus in the beginning of labour; the anterior parts being removed, as in the former table; but in this, the membranes not being broken, form a large bag, containing the waters and fœtus.—*A.* The substance of the uterus.—



*B. C. D.* The bones of the pelvis.—*E.* The coccyx.—*F.* The inferior part of the rectum.—*G.* The vagina.—*H.* The mouth of the womb largely stretched in time of a pain; with *I.* the membranes and waters. This circumstance makes it usually certain that labour is begun; whereas, from the degree of dilatation, represented in the former table, there is little to be ascertained unless the pains are regular and strong, the os uteri being often found more open several days, and even weeks, before labour commences.—*K.* The chorion.—*L.* The same dissected off at the inferior part of the uterus, in order to shew the head of the fœtus through the amnios. (*N. B.* This hint is taken from one of Dr. Albinus's tables of the gravid uterus.)—*M.* The placenta; the external convex surface of which divided into a number of lobes, is here represented, its concave internal parts being covered by the chorion.

The placenta has been found adhering to all the different parts of the internal surface of the uterus, and sometimes even over the inside of the os uteri; this last manner of adhesion, however, always occasions floodings as soon as the same begins to dilate.

Tables vi. viii. ix. x. shew the internal surface of the placenta towards the fœtus, with the vessels composing its substance proceeding from the funis, which is inserted in different placentas, into all the different parts of the same, as well as in the middle.

The thirtieth and thirty-third tables shew the insertion of the funis into the abdomen of the fœtus.

With respect to the expulsion of the placenta when the membranes break, the uterus contracts as the waters are evacuated till it comes in contact with the body of the fœtus: the same being delivered, the uterus grows much thicker, and contracts closely to the placenta and membranes, by which means they are gradually separated, and forced into the vagina. This shews that we ought to follow the method which nature teaches, waiting with patience, and allowing it to separate in a slow manner; which is a much safer practice, especially when the patient is weak; as the discharge is neither so great or sudden as when the placenta is hurried down in the too common method. But then we must not run into the other extreme, but assist when nature is not sufficient to expel the same.

*Vide* part i. book iii. Chap. i. sect. iv. Chap. ii. sect. ii. v. Part ii. coll. xiv. xxiii.

## T A B L E XII.

**S**HEWS (in a lateral view and longitudinal division of the parts) the gravid uterus, when labour is somewhat advanced.—*A.* The lowest vertebra of the back.—*B.* The scrobiculus cordis; the distance from which to the last-mentioned vertebra is here shewn by dotted lines; as also part of the region below the diaphragm.—*C.* The usual thickness and figure of the uterus when extended with the waters at the latter end of pregnancy.—*D.* The same contracted and grown thicker after the waters are evacuated.—*E.* The figure of the uterus when pendulous. In this case, if the membranes break when the patient is in an erect position, the head of the fœtus runs a risk of sliding over and above the ossa pubis, whence the shoulders will be pushed into the pelvis.—*F.* The figure of the uterus when stretched higher than usual, which generally occasions vomitings and difficulty of breathing. Consult on this subject Mr. Le-

veret



TABLE XIII

A



TABLE XIV

A



TABLE XVI



TABLE XV





veret sur le Mechanisme de differentes Grossesses.—*G.* The os pubis of the left side.—*H.* The os internum.—*I.* The vagina.—*K.* The left nympha.—*L.* The labium pudendi of the same side.—*M.* The remaining portion of the bladder.—*N.* The anus.—*O. P.* The left hip and thigh.

In this period of labour the os uteri being more and more stretched by the membranes pushing down and beginning to extend the vagina, a great quantity of water is forced down at the same time, and (if the membranes break) is discharged; whence the uterus contracts itself nearer to the body of the fœtus, which is here represented in a natural position, with the vertex resting at the superior part of the ossa pubis, and the forehead towards the right os ilium. As soon as the uterus is in contact with the body of the fœtus, the head of the same is forced backward toward the os sacrum, from the line of the abdomen *B. G.* into that of the pelvis, viz. from the uppermost *F.* to near the end of the coccyx, and is gradually pushed lower, as in the following table.

If the membranes do not break immediately upon their being pushed into the vagina, they should be allowed to protrude still farther, in order to dilate the os externum.

*Vide* part i. book i. chap. ii. sect. ii. Chap. iii. sect. iii. Book iii. chap. i. sect. i. ii. iv. Chap. ii. sect. iii. Chap. iii. sect. iv. numb. v. Part ii. coll. x. numb. iv. case iii. iv. coll. xiv. Part iii. coll. xxxiv. numb. ii. case iv.

### T A B L E XIII.

**I**N the same view and section of the parts as in table vi. shews the natural position of the head of the fœtus when sunk down into the middle of the pelvis after the os internum is fully opened, a large quantity of the waters being protruded with the membranes through the os externum, but prevented from being all discharged, from the head filling up the vagina.—*A.* The uterus a little contracted, and thicker, from some of the waters being sunk down before the child, or discharged.—*B.* The superior parts of the ossa ilium.—*C.* The inferior part of the rectum.—*D.* The vagina largely stretched with the head of the fœtus.—*E.* The os internum fully opened.—*F.* A portion of the placenta.—*G.* The membranes.—*H.* The ligamenta lata.—*I.* The ligamenta rotunda. Both these last stretched upward with the uterus.

The vertex of the fœtus being now down at the inferior part of the right os ischium, and the wide part of the head at the narrow and inferior part of the pelvis, the forehead, by force of the pains, is gradually moved backwards; and as it advances lower, the vertex and occiput turn out below the pubes, as in the next table. Hence may be learned of what consequence it is to know, that it is wider from side to side at the brim of the pelvis, than from the back to the fore part; and that it is wider from the fore to the hind head of the child, than from ear to ear.

*Vide* part i. book i. chap. i. sect. iii. iv. Also book iii. chap. iii. sect. iii. iv. numb. iii. Part ii. coll. xiv.

### T A B L E XIV.

**I**N a similar view and section of the parts with table xii. shews the forehead of the fœtus turned (in its progression downwards, from its position in the former table) backwards to the os sacrum, and the occiput below

below the pubes; by which means the narrow part of the head is to the narrow part of the pelvis, that is, between the inferior parts of the ossa ischium. Hence it may be observed, that though the distance between the inferior parts of the last-mentioned bones is much the same as between the coccyx and pubes, yet as the cavity of the pelvis is much shallower at the anterior than lateral part, the occiput of the fœtus, when come down to the interior part of either os ischium, turns out below the pubes: this answers the same end as if the pelvis itself had been wider from the posterior part than from side to side; the head likewise enlarging the cavity by forcing back the coccyx, and pushing out the external parts in form of a large tumour, as is more fully described in the following table.

*Vide* part i. ii. as referred to in the preceding table.—*A.* The uterus contracted closely to the fœtus after the waters are evacuated.—*B. C. D.* The vertebræ of the loins, os sacrum, and coccyx.—*E.* The anus.—*F.* The left hip.—*G.* The perinæum.—*H.* The os externum beginning to dilate.—*I.* The os pubis of the left side.—*K.* The remaining portion of the bladder.—*L.* The posterior part of the os uteri.

*N. B.* Although for the most part, at or before this period, the waters are evacuated, yet it often happens, that more or less will be retained, and not all discharged, till after the delivery of the child; occasioned from the presenting part of the fœtus coming into close contact with the lower or under part of the uterus, vagina, or os externum, immediately or soon after the membranes break.

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### T A B L E XV.

**I**S intended principally to shew in what manner the perinæum and external parts are stretched by the head of the fœtus in a first pregnancy, toward the end of labour.—*A.* The abdomen.—*B.* The labia pudendi.—*C.* The clitoris and its præputium.—*D.* The hairy scalp of the fœtus swelled at the vertex, in a laborious case, and protruded to the os externum.—*E. F.* The perinæum and anus pushed out by the head of the fœtus in form of a large tumour.—*G.* The parts that cover the tuberosities of the ossa ischium.—*H.* The part that covers the os coccygis.

The perinæum in this figure is stretched two inches, or double its length in the natural state; but when the os externum is so much dilated by the head of the fœtus as to allow the delivery of the same, the perinæum is generally stretched to the length of three, and sometimes four inches. The anus is likewise lengthened an inch, the parts also between it and the coccyx being much distended. All this ought to caution the young practitioner never to precipitate the delivery at this time, but to wait and allow the parts to dilate in a slow manner; as, from the violence of the labour-pains, the sudden delivery of the head of the fœtus might endanger the laceration of the parts. The palm of the operator's hand ought therefore to be pressed against the perinæum, that the head may be prevented from passing till the os externum is sufficiently dilated to allow its delivery, without tearing the frænum and parts betwixt that and the anus, which are at this time very thin.

*Vide* part i. book iii. chap. ii. sect. ii. Chap. iii. sect. iv. numb. i. and book iv. chap. i. sect. i. Also part ii. coll. xiv. xxiv. Part iii. coll. xl.

## T A B L E XVI.

AND the three following, shew in what manner the head of the fœtus is helped along with the forceps as artificial hands, when it is necessary to assist with the same for the safety of either mother or child. In this table the head is represented as forced down into the pelvis by the labour-pains, from its former position in table xii.—*A. B. C.* The vertebræ of the loins, os sacrum, and coccyx.—*D.* The os pubis of the left side.—*E.* The remaining part of the bladder.—*F.* The intestinum rectum.—*G.* The uterus.—*H.* The mons veneris.—*I.* The clitoris, with the left nympha.—*X.* The corpus convernosum clitoridis.—*V.* The meatus urinarius.—*K.* The left labium pudendi.—*L.* The anus.—*N.* The perinæum.—*Q. P.* The left hip and thigh.—*R.* The skin and muscular part of the loins.

The patient in this case may be, as in this table, on her side, with her breech a little over the side or foot of the bed, her knees being likewise pulled up to her belly, and a pillow placed between them, care being taken at the same time that the parts are by a proper covering defended from the external air. If the hairy scalp of the fœtus is so swelled that the situation of the head cannot be distinguished by the futures, as in table xxi. or if, by introducing a finger between the head of the child and the pubes or groins, the ear or back part of the neck cannot be felt, the os externum must be gradually dilated in the time of the pains with the operator's fingers (previously lubricated with hogs-lard) till the whole hand can be introduced into the vagina, and slipped up in a flattish form between the posterior part of the pelvis and child's head. This last then is to be raised up as high as possible, to allow room for the fingers to reach the ear and posterior part of the neck. When the position of the head is known, the operator must withdraw his hand, and wait to see if the stretching of the parts will renew or increase the labour-pains, and allow more space for the advancement of the head in the pelvis. If this, however, proves of no effect, the fingers are again to be introduced as before, and one of the blades of the forceps (lubricated with lard) is then to be applied along the inside of the hand or fingers and left ear of the child, as represented in the table. But if the pelvis is distorted, and projects forward at the superior part of the os sacrum, and the forehead therefore cannot be moved a little backward, in order to turn the ear from that part of the pelvis which prevents the end of the forceps to pass the same; in that case, I say, the blade must be introduced along the posterior part of the ear at the side of the distorted bone. The hand that was introduced is then to be withdrawn, and the handle of the introduced blade held with it as far back as the perinæum will allow, whilst the fingers of the other hand are introduced to the os uteri, at the pubes or right groin, and the other blade placed exactly opposite to the former. This done, the handles being taken hold of and joined together, the head is to be pulled lower and lower every pain, till the vertex, as in this table, is brought down to the inferior part of the left ischium or below the same. The wide part of the head being now advanced to the narrow part of the pelvis betwixt the tuberosities of the ossa ischium, it is to be turned from the left ischium out below the pubes and the forehead backward to the concave part of the os sacrum and coccyx, as in table xvii. and afterward the head brought along and delivered as in table xviii. and xix. But if it is found that the delivery will require a considerable degree of force from the head being large or the pelvis narrow, the handles of the forceps are



to be tied together with a fillet, as represented in this table, to prevent their position being changed, whilst the woman is turned on her back, as in table xxiv. which is then more convenient for delivering the head than when lying on the side.

This table shews that the handles of the forceps ought to be held as far back as the os externum will allow, that the blades may be in an imaginary line between that and the middle space between the umbilicus and scrobiculus cordis. When the forceps are applied along the ears and sides of the head, they are nearer to one another, have a better hold, and mark less than when over the occipital and frontal bones.

*Vide* part i. book iii. chap. iii. from sect. i. to vi. and part ii. coll. xxv. xxvi. xxvii. and xxix.

### T A B L E XVII.

**I**N the same view with the former, represents in outlines the head of the fœtus brought lower with the forceps, and turned from the position in the former table, in imitation of the natural progression by the labour-pains, which may likewise be supposed to have made this turn before it was necessary to assist with the forceps, this necessity at last arising from many of the causes mentioned in part i.

In this view the position of the forceps along the ears and narrow part of the head is more particularly expressed. It appears also, that when the vertex is turned from the left os ischium, where it was closely confined, it is disengaged by coming out below the pubes, and the forehead that was pressed against the middle of the right os ischium is turned into the concavity of the os sacrum and coccyx. By this means, the narrow part of the head is now between the ossa ischium, or narrow part of the pelvis; and as the occiput comes out below the pubes, the head passes still easier along. When the head is advanced so low in the pelvis, if the position cannot be distinguished by the sutures, it may for the most part be known by feeling for the back part of the neck of the fœtus, with a finger introduced betwixt the occiput and pubes, or toward one of the groins. If the head is squeezed into a longish form, as in table xxi. and has been detained many hours in this position, the pains not being sufficient to complete the delivery, the assistance of the forceps must be taken to save the child, though the woman may be in no danger. But if the head is high up in the pelvis, as in the former table, the forceps ought not to be used except in the most urgent necessity.

This table also shews that the handles of the forceps are still to be kept back to the perinæum, and, when in this position, are in a line with the upper part of the sacrum, and if held more backward, when the head is a little higher, would be in a line with the scrobiculis cordis. If the forceps are applied when the head is in this position, they are more easily introduced when the patient is in a supine position, as in table xxiv. Neither is it necessary to tie the handles, which is only done to prevent their alteration when turning the woman from her side to her back.

As I have had several cases where a longer sort of forceps, that are curved upward, are of great use to help along the head when the body is delivered first, as in table xxxv. the same are represented here by dotted lines. They may be used in laborious cases as well as the others, but are not managed with the same ease.

TABLE XVII



TABLE XVIII



TABLE XIX

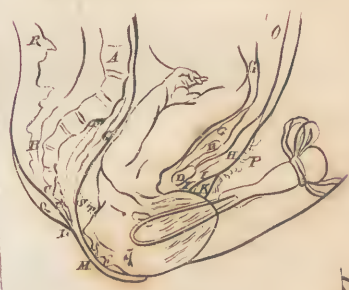


TABLE XX







Most of the parts of this table being marked with the same letters as the former, the descriptions there given will answer in this, except the following.—*L. M.* The anus.—*M. N.* The perinæum.—*O.* The common integuments of the abdomen.—*R.* The short forceps.—*S.* The long curved forceps. The first of these is eleven inches long, and the last twelve inches and a half; which I have after several alterations found sufficient; but this need not confine others who may chuse to alter them from this standard: *Vide* table xxxvii.

### T A B L E XVIII.

**I**N the same view and section of the parts, shews the head of the fœtus in the same position, but brought lower down with the forceps than in the former table; for in this the os externum is more open, the occiput comes lower down from below the pubes, and the forehead past the coccyx, by which both the anus and perinæum are stretched out in form of a large tumour, as in table xv.

When the head is so far advanced, the operator ought to extract with great caution; lest the parts should be torn. If the labour-pains are sufficient, the forehead may be kept down and helped along in a slow manner by pressing against it with the fingers on the external parts below the coccyx; at the same time, the forceps being taken off, the head may be allowed to stretch the os externum more and more in a gradual manner, from the force of the labour-pains as well as the assistance of the fingers. But if the former are weak and insufficient, the assistance of the forceps must be continued. (*Vide* the description of the parts in tab. xvi.) *S. T.* in this, represent the left side of the os uteri. The dotted lines demonstrate the situation of the bones of the pelvis on the right side, and may serve as an example for all the views of the same.—*a. b. c. b.* The outlines of the os ilium.—*D. e. f.* The same of the pubis and ischium. *i. i. k.* The acetabulum.—*m. n.* The foramen magnum.

*Vide* part i. book iii. chap. v. sect. iii. Part ii. collect. xxv.

### T A B L E XIX.

**I**N the same view and section of the pelvis, is intended by outlines to shew, that as the external parts are stretched, and the os externum is dilated, the occiput of the fœtus rises up with a semicircular turn from out below the pubes, the under part of which bones are as an axis or fulcrum, on which the back part of the neck turns; whilst at the same time the forehead and face, in their turn upward, distend largely the parts between the coccyx and os externum. This is the method observed by nature in stretching these parts in labour; and as nature is always to be imitated, the same method ought to be followed when it is necessary to help along the head with the forceps.

*Vide* the three former tables for the descriptions and references:

### T A B L E XX.

**I**N the same section of the parts, but with a view of the right side, shews the head of the fœtus in the contrary position to the three last figures; the vertex being here in the concavity of the sacrum, and the fore-

head turned to the pubes.—*A. B.* The vertebra of the loins, os sacrum, and coccyx.—*C.* The os pubis of the right side.—*D.* the anus.—*E.* The os externum not yet begun to stretch.—*F.* The nympha.—*G.* The labium pudendi of the right side.—*H.* The hip and thigh.—*I.* The uterus contracted, the waters being all discharged.

When the head is small, and the pelvis large, the parietal bones and the forehead will in this case, as they are forced downward by the labour-pains, gradually dilate the os externum, and stretch the parts between that and the coccyx in form of a large tumour, as in tab. xv. till the face comes down below the pubes, when the head will be safely delivered. But if the same be large and the pelvis narrow, the difficulty will be greater, and the child in danger; as in the following table.

*Vide* part i. book iii. chap. iii. sect. iv. numb. iii. Part ii. collect. xvi. numb. ii.

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T A B L E XXI.

**S H E W S** the head of the foetus in the same position as in the former table; but, being much larger, it is by strong labour-pains squeezed into a longish form with a tumour on the vertex, from the long compression of the head in the pelvis. If the child cannot be delivered with the labour-pains, or turned and brought footling, the forceps are to be applied on the head, as described in this figure, and brought along as it presents; but if that cannot be done without running the risk of tearing the perinaeum, and even the vagina and rectum of the woman, the forehead must be turned backward to the sacrum. To do this more effectually, the operator must grasp firmly with both hands the handles of the forceps, and at the same time pushing upward raise the head as high as possible, in order to turn the forehead to one side, by which it is brought into the natural position; this done, the head may be brought down and delivered as in tab. xvi. &c.

*Vide* part i. book iii. chap. iii. sect. iv. numb. ii. and part ii. collect. xxviii. Also the former table for the description of the parts, except *K.* The tumour on the vertex. The same compression and elongation of the head as well as the tumour on the vertex, may be supposed to happen in a greater or less degree in the xvi. xvii. xviii. xix. tables, as well as in this, where the difficulty proceeds from the head being large or the pelvis narrow. *Vide* tab. xxvii. xxviii.—*L.* The forceps. Sometimes the forehead may be moved to the natural position by the assistance of the fingers or only one blade of the forceps. The forceps may either be the straight kind, or such as are curved to one side, when it is necessary to use one or both blades.—*M.* The vesica urinaria much distended with a large quantity of urine from the long pressure of the head against the urethra; which shews, that the urine ought to be drawn off with a catheter, in such extraordinary cases, before you apply the forceps, or in preternatural cases, where the child is brought footling.—*N.* The under part of the uterus.—*O.* The os uteri.

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T A B L E XXII.

**S H E W S**, in a front view of the parts, the forehead of the foetus presenting at the brim of the pelvis, the face being turned to one side, the fontanel to the other, and the feet and breech stretched to the fundus uteri.—*A.* The superior part of the ossa ilium.—*B.* The anus.—*C.* The perinaeum



TABLE. XXI



TAB.

XXII



TAB. XXIII



TABLE. XXIV





perinæum.—*D.* The os externum ; the thickness of the posterior part before it is stretched with the head of the child.—*E.* The vagina.—*F.* The os uteri not yet fully dilated.—*G.* The uterus.—*H.* The membrana adiposa.

If the face is not forced down, the head will sometimes come along in this manner; in which case the vertex will be flattened, and the forehead raised in a conical form; and when the head comes down to the lower part of the pelvis, the face or occiput will be turned from the side, and come out below the pubes. But if the head is large, and cannot be delivered by the pains, or if the wrong position cannot be altered, the child must, if possible, be delivered footling, or delivered with the forceps.

*Vide* part i. book iii. chap. ii. sect. iii. Chap. iii. sect. iv. numb. iii. Part ii. collect. xvi. numb. iv. collect. xxviii.

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#### T A B L E XXIII.

**S**HEW S, in a lateral view, the face of the child presenting, and forced down into the lower part of the pelvis, the chin being below the pubes, and the vertex in the concavity of the os sacrum; the waters likewise being all discharged, the uterus appears closely joined to the body of the child, round the neck of which is one circumvolution of the funis—*A. B.* The vertebræ of the loins, os sacrum, and coccyx.—*C.* The os pubis of the left side.—*D.* The inferior part of the rectum.—*E.* The perinæum.—*F.* The left labium pudendi.—*G.* The uterus.

When the pelvis is large, the head, if small, will come along in this position, and the child be saved; for as the head advances lower, the face and forehead will stretch the parts between the frænum labiorum and coccyx in form of a large tumour. As the os externum likewise is dilated, the face will be forced through it; the under part of the chin will rise upward over the anterior part of the pubes; and the forehead, vertex, and occiput, turn up from the parts below. If the head, however, is large, it will be detained either when higher or in this position. In this case, if the position cannot be altered to the natural, the child ought to be turned, and delivered footling. If the pelvis, however, is narrow, and the waters not all gone, the vertex should if possible be brought to present; but if the uterus is so closely contracted that this cannot be effected, on account of the strong pressure of the same and slippiness of the child's head, in this case the method directed in the following table is to be taken.

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#### T A B L E XXIV.

**R**EPRESENTS, in the lateral view, the head of the fœtus in the same position as in the former table; but the delivery is supposed to be retarded from the largeness of the head, or a narrow pelvis.

In this case, if the head cannot be raised, and pushed up into the uterus, it ought to be delivered with the forceps in order to save the child. This position of the chin to the pubes is one of the safest cases where the face presents, and is most easily delivered with the forceps, the manner of introducing of which over the ears is shewn in this table. The patient must lie on her back, with her breech a little over the bed, her legs and thighs being supported by an assistant sitting on each side. After the parts have been slowly dilated with the hand of the operator, and the forceps introduced, and properly fixed along the ears of the child, the head is to be brought down

by degrees, that the parts below the os externum may be gradually stretched; the chin is then to be raised up over the pubes, whilst the forehead, fontanel, and occiput, are brought out slowly from the perinæum and fundament, to prevent the same from being hurt or lacerated. But if the fœtus can neither be turned nor extracted with the forceps, the delivery must be left to the labour-pains, as long as the patient is in no danger; but if danger is apparent, the head must be delivered with the curved crotchets. *Vide* tab. xxxix.

When the face presents, and the chin is to the side of the pelvis, the patient must lie on her side; and after the forceps are fixed along the ears, the chin is to be brought down to the os ischium, and then turned out below the pubes, and delivered in a slow manner as above.

*Vide* part ii. collect. xvi. numb. vi. as also tab. xvi. xvii. xviii. and xix, for the description of the parts.

### T A B L E XXV.

**S H E W S**, in a lateral view of the right side, the face of the fœtus presenting, as in tab. xxiii. but in the contrary position; that is, with the chin to the os sacrum, and the bregma to the pubes, the waters evacuated and the uterus contracted.—*A*. The os externum not yet begun to stretch.—*B*. The anus. *Vide* tab. xx. for the farther description of the parts.

In such cases, as well as in those of the last-mentioned table, if the child is small, the head will be pushed lower with the labour-pains, and gradually stretch the lower part of the vagina and the external parts; by which means the os externum will be more and more dilated, till the vertex comes out below the pubes, and rises up on the outside; in which case the delivery is then the same as in natural labours. But if the head is large, it will pass along with great difficulty; whence the brain, and vessels of the neck, will be so much compressed and obstructed as to destroy the child. To prevent which, if called in time, before the head is far advanced in the pelvis, the child ought to be turned and brought footling. If the head however, is low down, and cannot be turned, the delivery is then to be performed with the forceps, either by bringing along the head as it presents, or as in the following table. See the references in the preceding table.

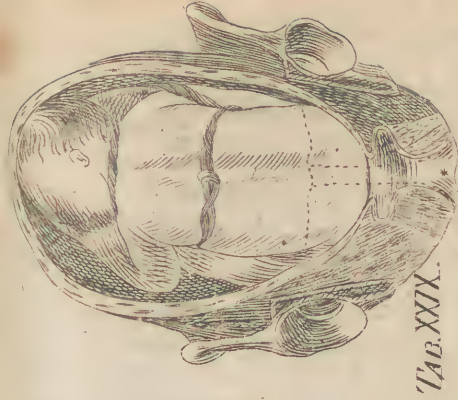
### T A B L E XXVI.

**R E P R E S E N T S**, by out-lines, in a lateral view of the left side of the subject, the fœtus in the same situation as in the former table.

The head here is squeezed into a very oblong form; and though forced down so as fully to dilate the os externum, yet the vertex and occiput cannot be brought so far down as to turn out from below the pubes (as in the foregoing table) without tearing the perinæum and anus, as well as the vagina and rectum.

The best method in this case, after either the short or long-curved forceps have been applied along the ears (as represented in the table) is to push the head as high up in the pelvis as is possible; after which the chin is to be turned from the os sacrum to either os ischium, and afterwards brought down to the inferior part of the last-mentioned bone. This done, the operator must pull the forceps with one hand, whilst two fingers of the other are fixed on the lower part of the chin or under-jaw, to keep the face in the middle, and prevent the chin from being detained at the os ischium as it comes along; and in this manner move the chin round with the forceps and





TAB. XXX.



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TAB. XXVII.



TAB. XXVIII.



TAB. XXV.



TAB. XXVI.



and the above fingers till brought under the pubes; which done, the head will be easily extracted, as in table xxiv.

If, before assistance has been called, the head is so squeezed down into the pelvis, that it is impossible to move the chin from the sacrum to either os ischium, so as to deliver with the forceps, for the safety of the child, the operator must wait with patience as long as the woman is not in danger, or there is no certainty of the death of the foetus: but if the patient runs the least risk, the head must be delivered with the crotchet.

In general, with respect to the posture of the woman in the application of the forceps, when the ears are to the sides of the pelvis, the forceps, as was observed in table xxiv. are most easily introduced when the patient lies upon her back, and her breech over the side of the bed; but when the ear is to the pubes or groin, they are better applied when the patient lies on her side, as was observed in the cases where the vertex presented.

*Vide* table xxiv. for the description of the parts, and the references. Also table xxxix. for the manner of using the crotchet.

T A B L E XXVII.

**GIVES** a lateral internal view of a distorted pelvis, divided longitudinally, with the head of a foetus of the seventh month passing the same. *Vide* the explanation of table iii. *A. B. C.* The os sacrum and coccyx. *D.* The os pubis of the left side.—*E.* The tuberosity of the os ischium of the same side.

The head of the foetus here, though small, is with difficulty squeezed down into the pelvis, and changed from a round to an oblong form before it can pass, there being only the space of two inches and one quarter between the projection of the superior part of the sacrum and ossa pubis. If the head is soon delivered, the child may be born alive; but if it continues in this manner many hours, it is in danger of being lost, on account of the long pressure upon the brain. To prevent which, if the labour-pains are not sufficiently strong, the head may be helped along with the forceps, as directed in table xvi.

This figure may serve as an example of the extreme degree of distortion of the pelvis, between which and the well-formed one are many intermediate degrees, according to which the difficulty of delivery must increase or diminish, as well as from the disproportion of the pelvis and head of the foetus; all which cases require the greatest caution, both as to the management and safety of the mother and child.

*Vide* part i. book iii. chap. ii. sect. iii. numb. v. Chap. iii. sect. iv. numb. iii. Part ii. coll. xxi. numb. i. and coll. xxix.

T A B L E XXVIII.

**GIVES** a side-view of a distorted pelvis, as in the former table, with the head of a full-grown foetus squeezed into the brim, the parietal bones decussating each other, and compressed into a conical form.—*A. B. C.* The os sacrum and coccyx.—*D.* The os pubis of the left side.—*E.* The tuberosity of the os ischium.—*F.* The processus acutus.—*G.* The foramen magnum.



This table shews the impossibility in such a case to save the child, unless by the Cæsarean operation; which, however, ought never to be performed, excepting when it is impracticable to deliver at all by any other method. Even in this case, after the upper part of the head is diminished in bulk, and the bones are extracted, the greatest force must be applied in order to extract the bones of the face and basis of the skull, as well as the body of the fœtus.

*Vide* part i. book iii. chap. iii. sect. vii. Chap. v. sect. iii. and part iii. coll. xxxi. xxxix.

### T A B L E XXIX.

**R**EPRESENTS, in a front view of the pelvis, as in table xxii. the breech of the fœtus presenting, and dilating the os internum, the membranes being too soon broke. The fore parts of the child are to the posterior part of the uterus; and the funis with a knot upon it surrounds the neck, arm, and body.

Some time after this and the following tables were engraved, Dr. Kelly shewed me a subject he had opened, where the breech presented itself, and lay much in the same position with its body as in table ix. supposing the breech in that figure turned down to the pelvis, and the head up to the fundus uteri.

I have sometimes felt in these cases (when labour was begun, and before the breech was advanced into the pelvis) one hip at the sacrum, and the other resting above the os pubis and the private parts to one side; but before they could advance lower, the nates were turned to the sides and wide part of the brim of the pelvis, with the private parts to the sacrum, as in this table; though sometimes to the pubes, as in the following table. As soon as the breech advances to the lower part of the basin, the hips again return to their former position, viz. one hip turned out below the os pubis, and the other at the back parts of the os externum.

*N. B.* In this case the child, if not very large, or the pelvis narrow, may be often delivered alive by the labour-pains; but if long detained at the inferior part of the pelvis, the long pressure of the funis may obstruct the circulation. In most cases where the breech presents, the effect of the labour-pains ought to be waited for, till at least they have fully dilated the os internum and vagina, if the same have not been stretched before with the waters and membranes. In the mean time, whilst the breech advances, the os externum may be dilated gently during every pain, to allow room for introducing a finger or two of each hand to the outside of each groin of the fœtus, in order to assist the delivery when the nates are advanced to the lower part of the vagina. But if the fœtus is larger than usual, or the pelvis narrow, and after a long time and many repeated pains the breech is not forced down into the pelvis, the patient's strength at the time of failing, the operator must in a gradual manner open the parts, and, having introduced a hand into the vagina, raise or push up the breech of the fœtus, and bring down the legs and thighs. If the uterus is so strongly contracted that the legs cannot be got down, the largest end of the blunt-hook is to be introduced, as directed in table xxxvii. As soon as the breech or legs are brought down, the body and head are to be delivered, as described in the next table, only there is no necessity here to alter the position of the child's body.

*Vide* part i. book iii. chap. iv. sect. i. ii. Part iii. col. xxxii.

The description of the parts in this and the following table is the same as in table xxii. only the dotted lines in this describe the place of the ossa pubis, and anterior parts of the ossa ischium which are removed, and may serve in this respect as an example for all the other front views, where, without disfiguring the table, they could not be so well put in.

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T A B L E XXX.

**S**HEWS, in the same view and with the same references as the former, the breech of the fœtus presenting; with this difference, however, that the fore parts of the child are to the fore part of the uterus. In this case, when the breech coming double as it presents, is brought down to the hams, the legs must be extracted, a cloth wrapped round them, and the fore parts of the child turned to the back parts of the woman. If a pain should in the mean time force down the body of the child, it ought to be pushed up again in turning, as it turns easier when the belly is in the pelvis, than when the breast and shoulders are engaged; and as sometimes the face and forehead are rather towards one of the groins, a quarter-turn more brings these parts to the side of the pelvis, and a little backwards, after which the body is to be brought down. If the child is not large, the arms need not be brought down, and the head may be delivered by pressing back the shoulders and body of the child to the perinæum, and, whilst the chin and face are within the vagina, to bring the occiput out from below the pubes, according to Daventer's method; or the operator may introduce a finger or two into the mouth, or on each side of the nose, and supporting the body on the same arm, fix two fingers of the other hand over the shoulders, on each side of the child's neck, and in this manner raise the body over the pubes, and bring the face and forehead out with a semicircular turn upward, from the under part of the os externum. All this may be easily done when the woman lies on her side; but if the child is large, and the pelvis narrow, it is better to turn the patient on her back, as described in table xxiv. and after the legs and body are extracted as far as the shoulders, the arms are to be cautiously brought down, and the head delivered. If the woman has strong pains, and when by the felt pulsation of the vessels of the funis umbilicalis, or the struggling motions of the fœtus, it is certain that the child is still alive, wait with patience for the assistance of the labour; but if that and the hand are insufficient, and the pulsation of the funis turns weaker, and if the child cannot be brought double, the breech must be pushed up; and if the resistance of the uterus is so great as to prevent the extraction of the legs, the patient ought to be turned on her knees and elbows. When the legs are thus brought down, the woman, if needful, is to be again turned to her back, to allow more freedom to deliver the body and head, as before described.

If the head after several trials cannot be delivered, without endangering the child from over-straining the neck, the long-curved forceps ought to be applied, as in table xxxv. If these fail, and the patient is not in danger, some time may be allowed for the effect of the labour-pains; which likewise proving insufficient, the crotchet must be used as in table xxxix. and when it is certain that the child is dead, or that there is no possibility of saving it.

## T A B L E XXXI.

**R**EPRESENTS, in a front view of the pelvis, the fœtus compressed by the contraction of the uterus into a round form, the fore parts of the former being toward the inferior part of the latter, and one foot and hand fallen down into the vagina. In this figure the anterior part of the pelvis is removed by a longitudinal section through the middle of the foramen magnum.—*A.* The superior parts of the ossa ilium.—*B.* The uterus.—*C.* The mouth of the womb stretched, and appearing in *O.* The vagina, —*D.* The inferior and posterior parts of the os externum.—*E.* The remaining part of the ossa pubis and ischium.—*F.* The membrana adiposa.

This and the three following tables, representing four different preternatural positions of the fœtus in utero, may serve as examples for the manner of delivery in these as well as in all other preternatural cases.

In all preternatural cases, the fœtus may be easily turned and delivered by the feet, if known before the membranes are broke and the waters discharged; or if the pelvis is narrow, and the patient is strong, the head, if large, may be brought down so as to present in the natural way; but if all the waters are discharged, and the uterus is strongly contracted to the body of the fœtus, this last method can seldom take place, on account of the strong pressure of the uterus, and slippiness of the child's head:

In the present case, the woman may either be laid on her back or side; as described in tables xvi. and xxiv. and the operator, having slowly dilated the os externum with his fingers, must introduce the same into the vagina, and push up into the uterus the parts of the fœtus that present; or if there is space for it, his hand may pass in order to dilate the os internum, if not sufficiently stretched previously by the membranes and waters. This done, he must advance his hand into the uterus, to know the position of the fœtus: and, as the breech is rather lower than the head, search for the other leg, and bring down both feet without the os externum. A cloth must then be wrapped round them; and, having grasped them with one hand, he is to introduce the other into the uterus, in order to raise the head of the fœtus, whilst the legs and thighs are pulled down by the hand that holds the feet. When the head is raised, and does not fall down again, the hand of the operator may be withdrawn from the uterus, and the delivery completed as directed in the two former tables. By the artless method of taking hold and pulling one or both feet, the breech may come down and the head rise to the fundus; but if this should not happen, there will be great danger of over-straining the fœtus, which is prevented by the former method. If the membranes are broken before the os uteri is largely opened, and the hand of the operator cannot be introduced, which sometimes happens in a first pregnancy, the parts of the fœtus should be allowed to protrude still farther, by which means the rigidity of the os internum will in time be lessened.

*Vide* part i. and iii. on preternatural labours.

## T A B L E XXXII.

**R**EPRESENTS, in the same view with the former, the fœtus in the contrary position; the breech and fore parts being toward the fundus uteri, the left arm in the vagina, and fore arm without the os externum, the shoulder being likewise forced into the os uteri.

The



The operator in this case must introduce his fingers between the back part of the vagina and the arm of the foetus, in order to raise the shoulder and make room for pressing his hand into the uterus to distinguish the position. This being known, he ought to push up the shoulder to that part of the uterus where the head is lodged, in order to raise the same to the fundus. If the body of the foetus does not move round, and thereby lies in a more convenient position for bringing down the legs, the hand of the operator ought to be pushed up still higher to search for and take hold of the feet, which are to be brought down as far as possible. If this should not change the position, the shoulder is to be pushed up, and the legs pulled down, alternately, till they are brought down into the vagina, or without the os externum; after which the delivery may be completed, as in the former case.

If the feet cannot be brought down lower than into the vagina, a noose may be introduced over both ankles, by which the legs are brought lower by pulling the noose with one hand, whilst the other, previously introduced into the uterus, pushes up the shoulders and head. By this double force the position of the foetus is to be altered, and the delivery effected. In these cases, as the shoulder is raised to the fundus, the arm commonly returns into the uterus; but if the arm is so swelled as to prevent the introduction of the operator's hand, and cannot be folded up or returned into the uterus, it must be taken off at the shoulder or elbow, in order to deliver and save the woman. If both the arms come down when the breast presents, the methods above described are to be used.

*Vide* the explanations and references of the foregoing table:

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### T A B L E XXXIII.

**EXHIBITS**, in the same view likewise of the pelvis with the former, a third position of the foetus when compressed into the round form, viz. the belly, or umbilical region, presenting at the os internum, and the funis fallen down into the vagina, and appearing at the os externum.

The delivery in this case is to be effected as in the former table, by pushing up the breast and bringing down the legs. When the belly presents, it is easier coming at the legs than when the breast presents, because in the former case the head is nearer to the fundus uteri, and the legs and thighs lower. If the belly or breast is forced down into the lower part of the pelvis, the child will be in danger from the bending of the vertebræ and the pressure of the spinal marrow. So great force is also required to raise these parts up into the uterus, in order to come at the feet, that it will sometimes be necessary to turn the woman on her knees and elbows, to diminish the resistance of the abdominal muscles. When the funis comes down without the os externum, if there is a pulsation felt, it must immediately be replaced and kept warm in the vagina, to preserve the circulation, and prevent a stagnation from its being exposed to the cold air. If the funis comes down when the head presents, the child is in danger, if not speedily delivered with the pains, or brought footling.

See explanations to the two former tables.

## T A B L E XXXIV.

**S**HEWS, in a lateral view of the pelvis, one of the most difficult preternatural cases. The left shoulder, breast, and neck of the fœtus presenting, the head reflected over the pubes to the right shoulder and back, and the feet and breech stretched up to the fundus, the uterus contracted at the same time in form of a long sheath round the body of the fœtus.—*A. B. C.* The os sacrum and coccyx.—*D.* The os pubis of the left side.—*E.* Part of the urinary bladder.—*F.* The rectum.—*H. I. K.* The privities.—*M.* The anus.—*M. N.* The perinæum.—*V.* The meatus urinarius.—*O.* The os uteri, not yet opened, and situated backward toward the rectum and coccyx.—*R. S.* The same represented in dotted lines, as opened when the labour is begun.—*T. U.* The same more fully dilated, but nearer to the posterior than anterior part of the pelvis.—*W. P.* The same not fully stretched at the fore part, though entirely obliterated at the back part, the uterus and vagina being there only sometimes one continued surface.

Hence it appears why the anterior part of the os uteri is frequently protruded before the head of the fœtus at the pubes, which, if it retards delivery, is removed by sliding it up with a finger or two between the head and last-mentioned part. *Vide* tables ix. x. xi. xii. xiii.

The manner of delivery in the position of the fœtus as represented in this table, is to endeavour with the hand to force up the part presenting, in order to raise the head to the fundus. If this is impossible from the strong contraction of the uterus, the operator must push up his hand in a slow and cautious manner along the breast and belly of the child, in order to come at the legs and feet, which are to be taken hold of, and brought as far down as the position of the fœtus will admit of. The body is then to be moved round, by pushing up the lower parts and pulling down the upper, till the feet are brought without the os externum, and delivery completed as in table xxxi. But if the feet cannot be got down so as to be taken hold of without the os externum, a noose must be fixed over the ankles, as in table xxxii.

*Vide* parts i. iii. as directed in table xxxi.

## T A B L E XXXV.

**S**HEWS, in a lateral view of the pelvis, the method of assisting the delivery of the head of the fœtus with the long curved forceps, in preternatural cases, when it cannot be done with the hands as described in tables xxix. and xxx.—*A.* The three lowest vertebræ of the loins, with the os sacrum and coccyx.—*B.* The os pubis of the left side.—*C.* The perinæum and anus pressed backward with the forceps.—*D.* The intestines.—*E.* The parieties of the abdomen.—*F.* The uterus.—*G.* The posterior part of the os uteri.—*H.* The rectum.—*I.* The vagina.

After the body and arms of the child are delivered, and the different methods used to bring down the head with the hands, as directed in the above table, and more fully described in parts i. and iii. the following method is to be tried in order to save the child, who must otherwise be lost by over-straining the neck and spinal marrow: The woman being in the supine position, as in table xxiv. one of the assistants ought to hold the body and arms of the child up toward the abdomen of the woman, to give more room to the operator, who having introduced one hand up to the

the child's face, and moved it from the side a little backward for the easier application of the forceps along the sides of the head, must then turn his hand to one of the ears and introduce one of the blades with the other hand between the same and the head, with the curved side toward the pubes, as in this table. This done, the hand is to be brought down to hold the handle of the blade of the forceps till the other hand is introduced to the other side of the head, by which means the same is pressed against the blade that is up, and which is thus prevented from slipping whilst the other hand introduces the second blade on the opposite side. The blades being thus introduced, care must be taken that, in joining them, no part of the vagina is locked in. After the forceps are firmly fixed along the sides of the head, the face and forehead must be turned again to the side of the brim of the pelvis, by which means the wide part of the head is to the wide part of the brim. This done, the head is to be brought lower, and the force gradually increased according to the resistance from the largeness of the head or narrowness of the pelvis. The forehead, when brought low enough down, is then to be turned into the concavity of the os sacrum and coccyx, the handles of the forceps raised upward, and the same caution used in bringing the head through the os externum as described in tables xix. and xxx. By this method the head will be delivered, the child frequently saved, and the use of the crotchet prevented, except in those basins that are so narrow that it is impossible to deliver without diminishing the bulk of the head.

*Vide* table xxxix. Also part i. book iii. chap. iv. sect. v. Part iii. coll. xxxiv. xxxv.

#### T A B L E XXXVI.

**R**EPRESENTS, in a lateral view of the pelvis, the method of extracting with the assistance of a curved crotchet, the head of the foetus, when left in the uterus, after the body is delivered and separated from it, either by its being too large, or the pelvis too narrow.—*A. B. C.* The os sacrum and coccyx.—*D.* The os pubis of the left side.—*E.* The uterus.—*F.* The locking part of the crotchet.—*g. h. i.* The point of the crotchet on the inside of the cranium.

If this case happens from the forehead being toward the pubes, or the child long dead, and so mortified that both the body and under-jaw are separated unexpectedly, the long forceps that are curved upward will be sufficient to extract the head; but if the same is large, and the pelvis narrow, and the delivery cannot be effected by the above method, then the head must be opened, that its bulk may diminish as it is extracted. The patient being placed either on her back or side, as in the explanation of table xvi. and xxiv. the left-hand of the operator is to be introduced into the uterus, and the forehead of the foetus turned to the right-side of the brim of the pelvis, and a little backward, the chin being downward; after which the palm of the hand and fingers are to be advanced as high as the fontanel, and the head grasped with the thumb and little finger on each side, as firm as is possible, whilst an assistant presses on each side of the abdomen with both hands, to keep the uterus firm in the middle and lower part of the same. This done, the operator having with his right-hand introduced and applied the crotchet to the head (the point being turned toward the forehead, and the convex side toward the sacrum) he must go up along the inside of the left-hand as high as the fontanel, and there, or near it, fix the point of the crotchet, keeping still the left-hand in the former position, till with the other he pierces the cranium with the point of the in-



strument, and tears a large opening in it from *K.* to *I.* ; after this, keeping the crotchet steady, he may slide down his left-hand in a cautious manner, lest the former position should be altered, and the head will sink lower down by the assistant pressing on the abdomen. The two fore-fingers of the left-hand are then to be introduced into the mouth, and the thumb below the under-jaw, the hand being above the blade of the crotchet. When this firm hold is taken, the operator may begin and pull slowly with both hands; and as the brain discharges through the perforation, the head will diminish and come along. If this method should fail from the slippiness of the head, or its being so much ossified that a sufficient opening cannot be made, the vertex must be turned down to the brim of the pelvis, the fontanel backward, and each blade of the long forceps introduced along the sides of the head, with the curved side toward the pubes. After they are joined and locked, the handles are to be tied together with a fillet, to keep them firm on the head ; an assistant is to keep the handles backward till the cranium is largely opened with the long scissors shewn in table xxxix. This done, the head is to be extracted in a slow manner, first turning the forehead to the side of the brim ; and as the brim evacuates, and the head comes lower down, again turning the forehead into the concavity of the sacrum, and completing the delivery, as in table xvi.

This table may also serve for an example to shew the method of fixing the crotchet on the head, when although the body is not separated from it, yet it cannot be delivered with the operator's hands or the long forceps, as in tables xxix. and xxxv.

*Vide* part i. book iii. chap. iii. sect. vii. Chap. iv. sect. v. ] Also part iii. coll. xxxi. xxxvi.

### T A B L E XXXVII.

AND the two following, represent several kinds of instruments useful in laborious and difficult cases.—*A.* The straight short forceps, in the exact proportion as to the width between the blades, and length from the points to the locking part ; the first being two and the second six inches, which with five inches and a half (the length of the handles) make in all eleven inches and a half. The length of the handles may be altered at pleasure. I find, however, in practice, that this standard is the most convenient, and with less difficulty introduced than when longer, having also sufficient force to deliver, in most cases, where their assistance is necessary. The handles and lowest part of the blades may, as here, be covered with any durable leather ; but the blades ought to be wrapped round with something of a thinner kind, which may easily be renewed when there is the least suspicion of venereal infection in a former case : by being thus covered, the forceps have a better hold, and mark less the head of the child. For their easier introduction, the blades ought likewise to be greased with hogs-lard.—*B.* represents the posterior part of a single blade, in order to shew the open part of the same, and the form and proportions of the whole. The handles, however, as here represented, are rather too large.

*Vide* table xxi. for the figure and proportions of the long forceps, that are curved upward, and covered in the same manner as the former.

The forceps were at first contrived to save the fœtus, and prevent as much as possible the use of sharp instruments ; but even to this salutary method recourse ought not to be had but in cases where the degree of force requisite to extract will not endanger, by its consequences, the life of the mother.

TABLE. XXXVII.



TABLE. XXXVIII.

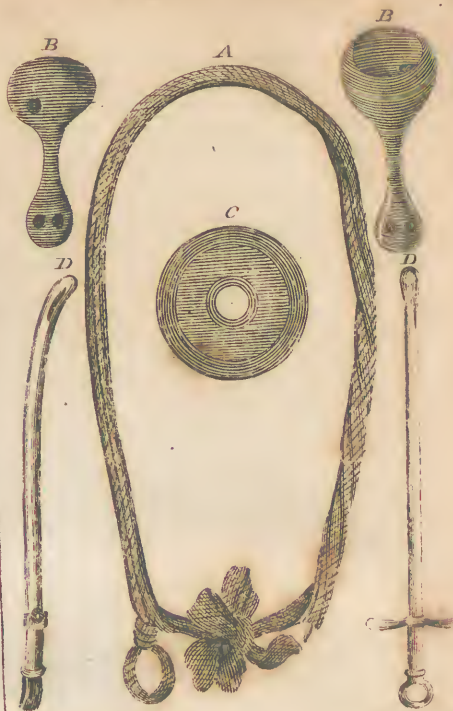


TABLE. XXXIX.

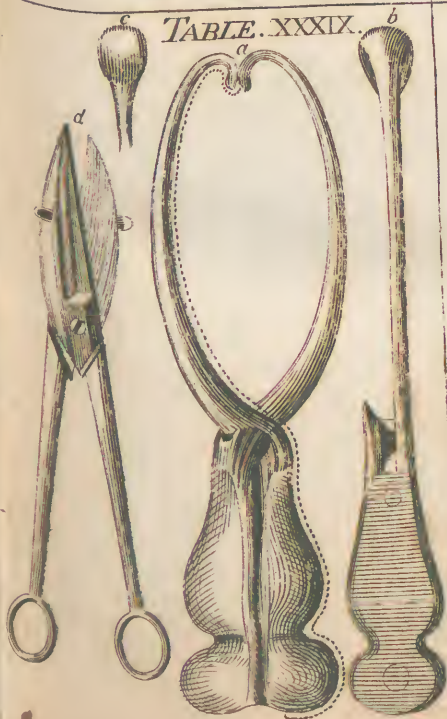
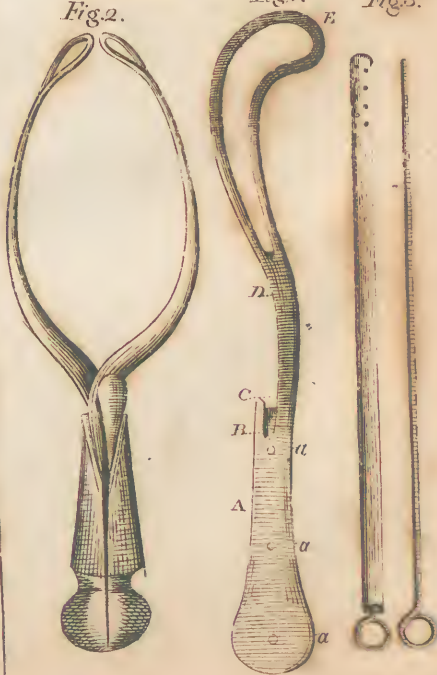


TABLE. XL. Fig. 1. Fig. 2. Fig. 3.







ther; for, by the imprudent use of the forceps, much more harm may be done than good.

See the explanation of table xvi. Also part ii. with the cases in the collection on that subject.—*C.* The blunt hook, used for three purposes, viz.

First, To assist the extraction of the head after the cranium is opened with the scissars, by introducing the small end along the ear on the outside of the head to above the under-jaw, where the point is to be fixed; the other extremity of the hook, being held with one hand, whilst two fingers of the other are to be introduced into the aforesaid opening, by which holds the head is to be gradually extracted.

Secondly, The small end is useful in abortions, in any of the first four or five months, to hook down the secundines when lying loose in the uterus, when the patient is much weakened by floodings from the too long retention of the same, the pains being also unable to expel them, and when they cannot be extracted with the fingers. But if the placenta still adheres, it is dangerous to use this or any other instrument to extract the same, as it ought to be left till it separates naturally. If a small part of the secundines is protruded through the os uteri, and pulled away from what still adheres in the uterus, the mouth of the womb contracts, and that irritation is thereby removed which would have continued the pains, and have separated and discharged the whole.

Thirdly, The large hook at the other end is useful to assist the extraction of the body, when the breech presents; but should be used with great caution, to avoid the dislocation or fracture of the thigh.

*Vide* table xxix. Also part i. book ii. chap. iii. Book iii. chap. iii, sect. vii. and chap. iv. sect. ii. Part ii. coll. xii. Part iii. coll. xxxi. xxxii.

### T A B L E XXXVIII.

**R**EPRESENTS, by *A.* the whalebone fillet, which may be sometimes useful in laborious cases, when the operator is not provided with the forceps in sudden and unexpected exigencies.

When the vertex of the foetus presents, and the head is forced down into the lower part of the pelvis, the woman weak, and the pains not sufficient to deliver it, the double of the fillet is to be introduced along the fore part of the parietal bones to the face, and, if possible, above the under-jaw; which done, the whalebone may be either left in or pulled down out of the sheath, and every weak pain assisted by pulling gently at the fillet. If the head can be raised to the upper part of the pelvis, the fillet will be more easily got over the chin, which is a safer and better hold than on the face. If the face or forehead presents, the fillet is to be introduced over the occiput. *Vide* Part i. book iii. chap. iii. sect. ii. Part ii. coll. xxiv.

In such cases likewise the whalebone may be supplied by a twig of any tough wood, mounted with a limber garter or fillet sewed in form of a long sheath.—*B.* Gives two views of a new kind of pessary for the prolapsus uteri, being taken from the French and Dutch kinds. After the uterus is reduced, the large end of the pessary is to be introduced into the vagina, and the os uteri retained in the concave part, where there are three holes to prevent the stagnation of any moisture. The small end without the os externum has two tapes drawn through the two holes, which are tied

ried to four other tapes, that hang down from a belt that furrounds the woman's body, and by this means keep up the pessary. This sort may be taken out by the patient when she goes to bed, and introduced again in the morning; but as this sometimes rubs the os externum, so as to make its use uneasy, the round kind, marked *C.* are of more general use. They are made of wood, ivory, or cork, the last covered with cloth and dipped in wax; the pessary is to be lubricated with pomatum, the edge forced through the passage into the vagina, and a finger introduced into the hole in the middle, lays it across, within the os externum. They ought to be larger or smaller, according to the wideness or narrowness of the passage, to prevent their being forced out by any extraordinary straining.

*Vide* part i. book iv. chap. i. sect. vii. Part iii. coll. xxiv.

*D.* Gives two views of a female catheter, to shew its degree of curvature and different parts. Those for common use may be made much shorter, for conveniency of carrying in the pocket: but sometimes, when the head or body of the child presses on the bladder above the pubes, it requires one of this length; and in some extraordinary cases I have been obliged to use a male catheter.

*Vide* part i. book ii. chap. i. sect. i. ii. Part ii. coll. x. numb. ii.

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### T A B L E XXXIX.

**R**EPRESENTS, by *a*, a pair of curved crotchets, locked together in the same manner as the forceps. It is very rare that the use of both is necessary, excepting when the face presents with the chin turned to the sacrum, and when it is impossible to move the head to bring the child footling, or deliver with the forceps. In that case, if one crotchet is not sufficient, the other is to be introduced, and, when joined together, will act as forceps in moving and turning the head more conveniently for the delivery of the same. They may also be useful to assist when the head is left in the uterus, and one blade is not sufficient. There is seldom occasion, however, for the sharp crotchet, when the head presents; the blunt-hook in table xxvii. being commonly sufficient, or even the forceps, to extract the same after it is opened with the scissors. Great care ought to be taken, when the sharp crotchet is introduced, to keep the point toward the fœtus, especially in cases where the fingers cannot be got up to guide the same. The dotted lines along the inside of one of the blades represent a sheath that is contrived to guard the point till it is introduced high enough; the ligature at the handles marked with the two dotted lines is then to be untied, the sheath withdrawn, and the point, being uncovered, is fixed as directed in table xxxvi.

The point, guarded with this sheath, may also be used instead of the blunt hook.—*b.* Gives a view of the back part of one of the crotchets, which is twelve inches long.—*c.* Gives a front-view of the point, to shew its length and breadth, which ought to be rather longer and narrower than here represented.—*d.* Represents the scissors proper for perforating the cranium in very narrow and distorted pelvises. They ought to be made very strong, and nine inches at least in length, with stops or rests in the middle of the blades, by which a large dilatation is more easily made.

The above instruments ought only to be used in the most extraordinary cases, where it is not possible to save the woman without their assistance.

*Vide* part i. book iii. chap. iii. sect. v. Chap. v. numb. i. Part ii. coll.

## T A B L E XL.

AMONG the few improvements which have been made in the obstetrical apparatus since the days of Dr. Smellie, the most important are the alterations in the forceps, by which the inconveniences formerly attending the use of that instrument are obviated, and the operation is rendered more safe and easy.

In contriving these alterations, the intentions were; 1. That the large curves should correspond as nearly as possible with that of the pelvis. 2. That their points should be thrown forward, and made round, to prevent their hitching, or even pressing uneasily against any part of the pelvis; and likewise to maintain their hold of the head whilst it is to be brought forward in that curved line of direction which nature observes. 3. That an inverted curve should be made toward the joints, whereby the perinaeum may be saved from injury, the extracting force rightly conducted, and the handles at the same time kept from pressing uneasily on the inferior and anterior parts of the pubes. 4. That their substance should be reduced as much as possible, so that they are not made flexible, or so thin at the edges as to hurt the part. 5. That their clams may be made to press equally on the child's head, and spread gradually from the joint, so as not to dilate the os vaginæ too suddenly. 6. That the clams be of a due breadth with the outer surface, a little convex, and extremely smooth, that they may not press uneasily or hurt the woman. 7. That their length be such as can be applied safely and commodiously within the pelvis, and at the same time suit the different sizes of the heads as much as possible.

The instrument, executed according to these intentions, is called the *short curved forceps*. It consists of two blades, or parts; each of which is distinguished into the handle *A*.—the joint *B. C.*—and the clams *D. E.* See *fig. 1.* which represents one of the blades before it is bent into its perfect state.—*a a a*, are three holes for admitting screws to fix the wooden handle.—*Fig. 2.* shews the instrument finished and locked, in which state it measures about 11 inches; and, when properly made, weighs about 11 ounces troy. The clams must be covered with the best Morocco leather shaved thin, moistened with water, and sewed on with waxed silk.

*Fig. 3.* Represents a catheter lately preferred by practitioners. It is straight, perforated with 16 holes in four rows near the point, and terminated by a slight knob. The length is about 5 inches three-quarters.



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# SMELLIE'S MIDWIFERY.

## PART THE SECOND.

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### A C O L L E C T I O N O F C A S E S I N M I D W I F E R Y.

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#### COLLECTION I.

*Of the separation, rigidity, and distortion of the bones of the Pelvis.*

[Vide Part I. Book I. Chap. I.]

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#### NUMB. I. CASE I. OF THE SEPARATION OF THE BONES.

A WOMAN, about the age of thirty-five, being in labour of her first child, complained of a violent pain at the juncture of the ilium with the sacrum on the right side; and in time of the severest pains, imagined these parts were separated from one another with violence. This circumstance was not at that time attended to by the midwife, who delivered her after a tedious, though natural, labour; yet, even after delivery, the pain in this part exceeded all her other complaints. I was called on the fifth day, when I found the pulse quick, full, and hard, her skin hot and dry, the lochia obstructed, a difficulty in her breathing, a pain and induration in one breast, and she was totally deprived of rest by the anguish in that part of the pelvis. She immediately lost twelve ounces of blood from the arm, an emollient clyster was injected, and a large quantity of hardened fæces discharged. In consequence of these evacuations, her back, head, and difficulty of breathing were relieved; but the pain in her hip still continuing, warm stupes were applied to that part, and bottles of hot water to her feet, and I directed her to drink plentifully of warm barley-water. By these means she was thrown into a profuse sweat, rested well that night, and next morning the fever was abated, while the uterus yielded a copious discharge; the pain and induration in her breast were greatly diminished, and the milk began to run out at the nipples; so that the child, which had before made a fruitless attempt, now sucked with ease. The only circumstance that now hindered her from lying quiet, and sweating, was the continuation of that pain in the pelvis, which to allay, I prescribed an embrocation of the anodyne balsam, and the following bolus:

Pilul.

R. Pilul. Matth. gr.viii. Sperm. ceti Di. Syr. de meconio q. f. f. bolus.  
h. f. fumendus.

This she was obliged to repeat every night, and sometimes oftener, in order to procure rest and maintain the necessary diaphoresis; and a clyster was administered every third day. Ten days elapsed before she could be moved out of bed, and twice that time before she could sit up in a chair. When her right leg was moved, her sensation was such, as if the ilium and sacrum of that side were torn asunder; and with my hand upon the part I could perceive a sensible motion in these bones. At the end of the month, she was not able to walk or stand, without being supported under the right arm by an assistant or a crutch, and continued in that situation five or six months; after which she found such benefit from the cold bath, that she could walk with the assistance of a cane. She had several children afterward, and her labours were easy; but they commonly, in some degree, affected that part, which never recovered its former strength and stability.

### CASE II. Communicated by Dr. Smollett.

**A** GENTLEWOMAN about the age of twenty-seven, of a slender make, thin habit, and lax fibre, was, in the eighth month of her first pregnancy, incommoded in her walking by a pain and crackling about the pubes, which, when I examined, I felt a surprizing relaxation of the ligament that connects the share-bones; inso much, that while she lay in bed on one side, I could easily move them in such a manner, that they seemed to ride each other: however, she felt no great inconvenience from this preternatural extension, which certainly widened the pelvis for the more commodious passage of the child; and the ligament gradually recovered its tone: so that in two months after her delivery, the ossa pubis were as firmly united as ever.

Although I myself have never perceived such separation in the bones of a living subject, Dr. Lawrence once shewed me the pelvis of a woman who died soon after delivery, in which all the three bones were separated almost an inch from one another. I likewise saw the same phenomenon in a pelvis belonging to Dr. Hunter. Spigelius, in his Anatomy, lib. ii. cap. xxiv. says, he has seen such a relaxation, which however, he observes, very rarely occurs. Dr. Monro, who, in his Osteology, quotes this author and some others, owns he had never met with this kind of separation, either in the course of his practice or dissections; yet has had reason to suspect a relaxation of the ligaments respecting the ossa innominata and sacrum, in some women of a delicate make, who, after hard labour, complained of pain, weakness, and a sort of jerking motion in this place; and though nothing extraordinary was perceptible by the touch, could neither sit nor stand without pain for the space of several months; nay, the weakness continued for a much longer time, during which they imagined themselves always sinking down between the haunch-bones.

### NUMB. II. CASE I.

OF THE OS COCCYGIS OSSIFIED AND BENT INWARD.

**I** HAVE of late, in a very particular manner, examined the os coccygis, especially in laborious cases, and in women who were turned of thirty before the birth of the first child; and have found it actually

ossified in two patients, the first turned of forty, and the other about the age of thirty-three: but in neither of these cases could I perceive that this rigidity retarded the labour; for, in both, when the head of the child came down to the os externum, it passed along, and the women were as easily delivered as those in whom the coccyx is moveable, though both children were of an ordinary size. The coccyx and ischia being much lower than the pubis, the back part of the head is commonly pushed out below the last, by that time the forehead is pressed against the coccyx; for, in measuring from the brim of the pelvis, we find that the pubis, being much shallower than the other bones, allow an easy passage for the occiput to come out from below the same; for which reason an ossified coccyx seldom prevents the delivery, unless the head is larger than common, or the coccyx is bent inward in an extraordinary manner.—*Vide* tab. i. ii. and iv.

### N U M B. III.

#### OF THE NARROW AND DISTORTED PELVIS.

**A**LTHOUGH cases of this kind are more naturally inserted among the operations of midwifery, I shall mention a few in this place, in order to preserve the regularity of our plan.

The most common distortion of the pelvis is from the protrusion or jutting forwards of the last vertebra of the loins with the os sacrum, and sometimes of two or three of the lowest vertebral bones. I have been concerned in a few cases, and in particular was called to three women in whom the pelvis was so narrow, that the distance between the lowest vertebra and the pubis did not exceed two inches and a half. The first I delivered four times; but found it impossible to save any of the children, except one, which was small, and even in that the shoulder was dislocated.

*Vide* collect. xxxiv. and the third table of anatomical prints.

The second was twice delivered by another gentleman, and three times by myself; and only one child was saved, by being born in the eighth month, of a very small size. Both these patients were small in stature, and distorted in the spine. The third, who was a tall woman, but had been ricketty for two or three years in her infancy, I delivered three times with great fatigue, but could save none of the children that were large. At last, however, she bore a live child in the seventh month. *Vide* coll. xxxv. also table xxvi. and xxvii. I have been called to several others, where the pelvis appeared at that part not to exceed three inches, or three inches and an half. When the children were large, it was impossible to save them, either by the forceps or by turning; but when I was called in time, and found them small, or even of a middle size, the patient was commonly delivered by one of those methods, if the labour-pains were not sufficient.

I have been several times bespoken to attend women in their first children by their friends, who were apprehensive that they would have difficult or dangerous labours, because they were distorted in their backs. Eight patients, in these circumstances, I delivered in the course of a year, and six of them had easy natural labours; the other two were more difficult, which proceeded from the large size of the children, and the small make of the mothers. In a few cases, I have found one or two bones of the sacrum jutting inward to such a degree, that the head of the child passed with great difficulty; in two of these I used the forceps, and at one time was obliged to dilate the bones of the cranium, as the lower ends of the ossa ischia were scarce three inches asunder.



## COLLECTION II.

*Operations performed upon the external parts.*

( Vide Part i. Book i. Chap. ii. Sect. i.)

## C A S E I.

## PRETERNATURAL SIZE OF THE NYMPHÆ.

**I** WAS called to a young woman, who, by a fall from an hay-loft upon a post below, had bruised the labia pudendi. Besides an inflammation of the parts, I found one of the nymphæ so preternaturally large, as to hang down three inches without the labia. Her mother was surprised to see such an extraordinary excrescence, which the daughter had concealed from her knowledge, and desired me, after the inflammation was removed, to remedy, if possible, this inconvenience, as the girl was to be married in a little time. The excision was accordingly performed with great ease, as that part next the labia was very thin. The patient could recollect no cause to which this excrescence might be owing; but said, she first perceived it when she was sixteen years of age; that it gradually enlarged, and frequently gave her great uneasiness, by itching, and being subject to pricking pains. The outward edge and extremity was about an inch thick, extending two inches from the upper to the under part. The cause did not seem to have been venereal, but merely a swelling of the glands.

## C A S E II.

**I** WAS present at the extirpation of the nymphæ, which were excessively large and pendulous, in a woman who alledged, that the disorder proceeded from a venereal taint, of which she had been formerly cured.

Mauriceau, in Observation 313, mentions his taking off by ligature an elongation of the carunculæ myrtiformes.

## C A S E III.

## OF AN OBSTRUCTED HYMEN.

**A** WOMAN brought her daughter from the country for my advice. he had been a year married, and, in her own opinion, was in the eighth month of her pregnancy, although she was regular in the discharge of the catamenia. She affirmed she had frequently felt the motion of the child, and was grown much bigger than her ordinary size. I examined the abdomen, but could not feel the circumscribed tumour of the uterus; indeed she was corpulent, so that the belly was large, though soft. I then directed her to lean forwards on the back of a chair, and seating myself behind, attempted to examine the uterus by the vagina, when I found the entrance obstructed.

Through the persuasion of her mother, she consented to have the parts inspected; and being laid supine upon a couch, I separated the labia, when I perceived the hymen in form of a crescent, from the middle of which proceeded a kind of ligament attached to the lower part of the meatus urinaris, leaving a passage on each side, capable of admitting a

probe into the vagina, and of yielding passage to the menstrual discharge, but effectually obstructing the introduction of the penis. Having snipped this attachment asunder, I introduced my finger into the vagina, and felt the uterus rising up before it, as in the unimpregnated state, without any sensible weight or stretching of the part. From this circumstance I concluded, and assured her, she was not with child; then introduced a large thick tent, dipped in red-wine, and secured it with a bandage. After this operation, she soon became pregnant, and has since been delivered of several children.

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#### C A S E IV.

**A** WOMAN brought to me a girl five or six years old, whose hymen was imperforate, though it had been twice opened by a surgeon, but the lips of the incision had united again.

I made an opening in the same place with a bistory, which I gradually dilated, first with my little finger, and then with the fore finger, until I could touch the os uteri; then, snipping with a pair of scissors a small portion of the hymen that remained next to the frænum, I introduced a large tent, which was kept in the part by compresses and a proper bandage.

Hildanus, in *Centuria 3, Observ. 60*, gives three examples in which the passage was shut up by a membrane.

The first was a girl of sixteen, who was once a month seized with violent pains in her belly, faintings, head-achs, and sometimes epileptic fits; which, on a copious bleeding at the nose, vanished, and did not return till the next period.

She had refused several advantageous matches in consequence of these infirmities; which being communicated to our author, he inspected the pudenda, and, finding the vagina shut up by a strong membrane, he directed an incision to be made; but the young woman being terrified at the thoughts of the knife, refused to submit to the operation.

The second was a young woman at Paris, who being married could not admit the embraces of her husband; and he, on that account, sued for a divorce; but, as she suspected herself with child, several eminent surgeons examined the parts, and found the entrance to the vagina shut up by a strong callous membrane, in which were small openings, sufficient to allow the menstrual discharge.

This membrane being dilated, and proper pessaries and applications used to keep the passages open, the husband was satisfied, and the woman was in six months safely delivered of a full-grown child.

Mauriceau likewise, in *Observation 489*, gives an account of a woman having conceived, and been delivered of a child, though the hymen had not been broken in coition.

The third case of Hildanus nearly resembles the following, communicated by Dr. D. Monro.

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#### C A S E V.

**A** GIRL of fifteen had all the symptoms of the menstrual discharge, which continued to seize her regularly every month, though nothing was evacuated from the uterus. When she attained the age of nineteen, her belly was considerably swelled; and finding a large tumour in her pudenda,

denda, she applied for relief to his father, who immediately perceived it was occasioned by an imperforated hymen. This he forthwith opened with a lancet, which was instantly followed by a discharge of about three pints and an half of blood, of the consistence of butter-milk, and colour of grumous blood, though without the least smell or fætor: about half a pint of the same fluid was evacuated before morning, and the girl did well.

### C A S E VI.

Communicated by Dr. George Macaulay, Physician to the Lying-in-Hospital in Brownlow-street.

**I** WAS desired to a visit a young woman, about nineteen years of age, of a large make, and full-breasted, who was in exquisite pain, and could not make water. Her belly being very much swelled, her pulse feverish, and her pains exactly resembling those of labour, I ordered her to be bled, a clyster to be injected, and prescribed some other medicines. Next morning, I was informed more circumstantially of her illness by her mother, who said she had been complaining for some months, though pretty well at intervals; but now there was something forcing down at her privy parts. In consequence of this information, I examined her in a cursory manner, because I had called in on my way to another patient, to whom I was sent for in a hurry. I found the belly very much distended, and, endeavouring to pass one finger into the vagina, felt what I then took to be the membranes, with the waters pushing pretty low down.

From this circumstance I concluded she was in labour, and left her for the present, after having intimated to the mother that a little time would, in all probability, determine the nature of her daughter's complaint. In my return I called again, and found the girl in exquisite agony, though matters were not at all advanced, during three hours which had elapsed in my absence.

Then it was I thought of enquiring whether or not she had ever undergone the menstrual discharge, when, being answered in the negative, I examined more carefully, and found what I had mistaken for the membranes was no other than the imperforated hymen protruded by some fluid as far as the external labia.

Having, upon this discovery, signified the only and certain means of cure to the patient and her mother, and they consenting to the operation, I divided the thick strong membrane with a knife, and evacuated, as near as I can guess, two quarts of thick black blood. As it flowed out, and the great pressure was removed from the neck of the bladder, the urine was discharged, and the poor girl said she found herself in heaven.

She was afterwards seized with shiverings and faintings, for which I prescribed cordials and the bark, upon a presumption that the parts, from the long-continued pressure, might be disposed to mortification.

She recovered very fast, and was married in six months after the aperture was made.

Ruyfch. tom. i. observat. 22, says, he was called to a woman in labour, whose hymen was entire, and prevented the delivery of the child, by whose head it was distended. An incision being cautiously made, he perceived another thick membrane farther in the vagina, which being also opened, the woman was delivered.



Saviard, observ. iv. relates the case of a young lady whose vagina was obstructed by a membrane, which being cut, two pints of a stinking matter, of the consistence of leys of wine, were discharged.

He likewise gives an instance of the entrance of the vagina being so much contracted by the indiscreet use of astringents, that a probe could hardly be admitted : but this opening was enlarged upon a directory, so as to admit a tent an inch and a half in circumference.

## COLLECTION III.

OF THE THICKNESS OF THE UTERUS IN TIME OF GESTATION.

**S**OME years ago (*vide* part iii. col. xxxix. case i. and ii.) I had opportunities of opening two women who had arrived at their full time, but died of violent floodings, before any assistance could be procured to deliver them. The membranes were still unbroke, and both uteri kept at their full extent by a large quantity of water. When I opened them, with intent, if possible, to save the children, I found each about a quarter of an inch thick. This is likewise the state of an uterus now in my possession, taken from a woman who died in the eighth month of her pregnancy, before the membranes were broke.

I have assisted in opening several women who died after delivery, in consequence of excessive weakness and violent floodings. When the uterus was not much contracted, it was not much thicker than that I have described ; but in those who died a few days after delivery from obstructions of the lochia and a fever, the uterus was contracted to a small size, and generally from one to two inches thick : I must, however, except one case of a woman, who seemed to have been seven or eight months gone with child ; yet the uterus was contracted to a small bulk, though, when stretched, it did not exceed the eighth or tenth part of an inch in thickness at the fundus.—*Vide* Dr. Garrow's letter, coll. xiii. numb. i.

## COLLECTION IV.

*Of obstructions of the catamenia, the immoderate flux of the menses, and of the fluor albus.*

### NUMB. I. CASE I.

THE CATAMENIA OBSTRUCTED.

**A**GENTLEWOMAN turned of twenty, who had always enjoyed good health and a regular discharge of the menses, happened, during that evacuation, to fall into a river in very cold weather, and was obliged to ride a full mile before she reached her home. By this accident the catamenia were entirely obstructed, and I was called to give my advice and assistance. When I arrived at the place, she had been in bed some hours, and complained of violent pains in her head and back ; her pulse was quick, she breathed with difficulty, and seemed a little delirious.

It was some time before I knew the discharge was upon her when she fell into the water, consequently I was ignorant of the obstruction. She was immediately bled in the arm, to the quantity of twelve ounces; but finding no relief from this evacuation, she lost eight ounces more, and fainted away; the pains, however, and difficulty of breathing soon abated, and a profuse sweat ensued. This was encouraged by frequent draughts of weak white-wine whey; the pulse became more calm and regular, the delirium gradually ceased, she enjoyed a profound sleep, and next morning seemed to be in perfect health.

I was then informed of the obstruction; and, understanding she was costive, prescribed a clyster, which had a favourable operation: that same evening I directed her feet to be bathed in warm water, and desired she might sit over the steams of it, so as that the vapour should foment her lower parts.

Next day she was gently purged with an infusion of senna and manna; but the discharge did not return, although she was perfectly easy, and free from all complaints, but that of being low-spirited from the evacuations she had undergone. I recommended warmth, gentle exercise, and food of easy digestion, in hope that, as she was of an healthy constitution, nature would restore the regularity of the discharge. Nor was I disappointed in my expectation: at the end of four weeks, the menses appeared as usual, she was in a little time married, and has never since had any complaint of that nature.

It would be equally tedious and unnecessary to insert a number of such cases which happened in the course of my practice. I shall only observe, that gentle evacuations, exercise, and a low diet, generally remove those obstructions in the first four or five months; and, unless the fluids acquire a wrong turn by some other kind of irruption, such as a discharge of blood from the hæmorrhoidal veins, stomach, lungs, nose, and sometimes, though very seldom, through the hairy scalp, cuticle of the legs, and other parts; I say, except when diverted by such preternatural hæmorrhages, the menses commonly return, or else the patient is afflicted with those complaints which proceed from a weak and languid circulation of the fluids. In this case, the method recommended above must be altered, and the obstruction removed by medicines that quickened the circulation of the blood; such as gentle emetics, bitter and aromatic infusions, preparations of steel, chalybeate waters, riding, and nourishing diet. In a word, when the obstruction is owing to plethora, rigidity, or tension, evacuations are proper; but when it proceeds from a weak and relaxed habit of body, those things that nourish and strengthen the constitution are most effectual. Great attention is therefore required to consider these different circumstances, and experience to judge of the indication, especially as almost all the complaints of unmarried women proceed from the irregularity of this discharge.

During my general practice in the country, when my advice was solicited by female patients who laboured under either an obstruction, immoderate discharge, or irregularity of the menses, especially if the disorder was of long continuance, I succeeded best by following the methods recommended by the late learned Dr. Friend. I shall therefore insert a summary of his cases, with regard to the symptoms and practice; and refer the reader to his *Emmenologia* for his theory of these distempers.

## C A S E I.

A YOUNG woman, eighteen years of age, and till that time free from the menses, complained of a sharp pain about the loins, knees, and ankles. She also laboured under a dyspnœa, nausea, and gripings of the stomach : upon the least stirring there was a palpitation of the heart. Her countenance was of a florid colour, her pulse weak and slow. These symptoms had continued violent for almost six months. He first ordered the following cathartic :

R Calomelan. ℥i. Refin. jalap. gr. v. tartar. vitriolat. gr. iv. m. f. pulv. cap. manē in conserv. rosar.

After the operation of the above medicine, she was ordered the following electuary and infusion :

R Conserv. absynth. Roman. ʒij. Æthiop. min. ʒj. Chalyb. cum sulphur. p. p. ʒss. Rad. gentian. curcum. pulf. ā ʒij. Syr. caryoph. q. f. m. f. Elect. cap. q. n. m. ter in die, hor. med. superbib; cochl. v. infus. seq.

R Limat. chalyb. ʒj. fs. infunde in cerevisiæ tenuis ℔ iij. per triduum, deinde adde rad. gentian. incis. ʒ fs. Rub. tinctor. curcum. ā ʒij. fumitat. Absynth. vulgar. centaur. minor ā m. i. bac. junip. ʒ fs. Sem. cardamom. min. cubeb. ā ʒj. Mem. fiat infus. per diem. In colaturæ quolibet haustu cap. gt. xx: mixtur. seq.

R Sp. sal. ammon. elix. p. p. ā ʒij. m.

He designedly omitted bleeding, because of the weakness of the patient.

October 28 (three weeks afterward) in the afternoon, she complained less of her stomach, the pulse was stronger, and her strength much increased.

October 30. The menses came down of a laudable colour. The pain at her loins and ankles immediately vanished. The flux continued eight days, during which she was forbid the use of her medicines ; which being however repeated, after another week, the menses flowed regularly again at the next period, and the patient entirely recovered her health.

## C A S E II.

A WOMAN about thirty years of age, had not had the menses for the space of two years. Upon the detention of which she was seized with a dry cough, violent dyspnœa, palpitation of the heart, pain in the head, a vertigo, loss of appetite, indigestion, and inflation of the stomach ; sometimes a vomiting, decay of strength, night-sweats, a vicissitude of heat and cold, and a trembling ; and sometimes the blood broke forth at the nostrils. The pulse was very weak.

He says the indications of cure seemed to be three.

I. To restore a good digestion in the stomach.

II. To increase the impulse of the blood.

III. To relax the uterine vessels.

To relieve the pains and decay of strength, he ordered the following cardiac :

R Sp. sal. ammon. tinct. croci. Laud. liq. ā ʒj. m. gt. xxx. sapius in quovos vehiculo.

By the use of these things, the pains very much abated, and her strength was recruited.

November



November 2 (two days afterward) she took the cathartic prescribed in the former case, which purged her six times, and eased the dyspnœa.

November 3, she made use of the electuary and infusion described in the former case; not neglecting, in the mean time, the cardiac mixture. The following emollient fomentation was applied to the region of the uterus to relax the vessels:

R Rad. althææ. Lil. alb.  $\bar{a}$   $\bar{z}$ ij. fem. Lini, fenugræc.  $\bar{a}$   $\bar{z}$ ij. Flor. camæmeli, aneth.  $\bar{a}$  p. i. Marjoran. m. i. Bulliant ex vin. & aq. part. æq. liquor sit pro fomentatione bis in die applicand.

November 8. The pulse was somewhat stronger; but hardly any change in the symptoms.

November 15. Nothing new, except that the appetite seemed to return, and the nocturnal sweats vanished.

November 22. A whitish humour flowed from the uterus, which ceased after five days. He remarks, that there is frequent mention among authors of pallid menses.

December 1. The symptoms, although much milder, were not however yet removed. The following purge was prescribed:

R Pil. Ruf.  $\bar{z}$  fs. Refin. jalap. gr. iij. Ol. cassiafr. gt. i. Balf. Peruv. q. f. m. f. pil. mediocr.

She likewise returned to the use of the electuary, infusion, and mixture; which being duly taken, the pulse grew stronger, and her strength was recruited.

December 19. The menses were brought down of a pretty red colour, which continued for three days. Upon their breaking forth, the symptoms were so much abated, that she complained only of some small difficulty in her breathing, and pain of her head. But repeating the infusion, her health, at the month's end, returned with the catamenia.

### C A S E III.

A LAUNDRY-MAID, of a sanguine habit, aged twenty-four years, caught cold, and by washing her legs in cold water in time of the menses, they were wholly suppressed for the space of one year; yet without any remarkable detriment to her health; which he imagined proceeded from her hard labour and exercise. But at the year's end she was attacked with most of the symptoms as in the second case; only there arose a hard tumour on the tibia, for which he ordered a vein to be opened in the arm. As that did not relieve the tumour, he ordered a cathartic, and a bitter chalybeate infusion, with the emollient fomentation.

October 28 (three weeks afterward) the purge was repeated, and the tumour became milder.

November 6. The pulse increased with the strength, and, to provoke the menses, the saphæna was opened.

November 11. The menses flowed in a small quantity. Her florid colour returned again, and the tumour, with the other symptoms, vanished.

He gives three other cases. The first two had their complaints from the menses being irregular and in too small a quantity; but the third was that of a married woman, about twenty-five years of age; she had a decrease of the menses for almost a year, but a total suppression for the three last pe-

riods. All these he treated according to their different complaints, but brought them regular principally by the use of chalybeate medicines.

I have had many patients, who, in obstructions of the menses, if they were attacked with the discharges from other parts of the body of different kinds, either periodically or continued, have frustrated all attempts to bring back the catamenia, and prevented conception. If the discharges were from the lungs, stomach, and other viscera, they frequently proved fatal to the patients; if from the external parts, as hæmorrhages from the nose, hairy scalp, legs, or issues in different parts, although they partly prevented the removal of the obstruction, yet they kept the patients in a tolerable state of health. Skenckius, in his *Observationum Medicinalium*, lib. iv. de Conceptione, p. 613, gives several cases from different authors, of some women who conceived before they had the menses, others who bore several children, and never had any such discharge.

Mr. Pearce, in the Bath Memoirs, chap. xix. from p. 187, to p. 196, gives four cases of girls labouring under the chlorosis, or green sickness, who, after trying many medicines in vain, were cured by drinking the Bath waters, and frequently bathing in them.

*Vide* Hildani, cent. v. observ. xli.

## NUMB. II. CASE I.

### IMMODERATE FLUX OF THE CATAMENIA.

I WAS called to a young woman about the age of eighteen, who was very much weakened by an immoderate discharge of the menses. She had been of an healthy constitution, and regular in her monthly evacuation for the space of a whole year; but, about six months before I saw her, she was, in time of the discharge, over-heated with dancing; in consequence of which the menses flowed to such a quantity as threw her into fainting fits, so that she was obliged to be carried home and put to bed, where she was supported by a nourishing diet, and in ten days was free of the discharge. Yet, every three weeks after this period, she was attacked in the same manner, though in a less violent degree, and continued ill about the same space of time. By this excess of evacuation, she was reduced from an healthy constitution and florid complexion, to a weak habit of body and pale visage; and, when I was called, actually lay in a swoon, occasioned by the great discharge; and her pulse, which at any time was low, I could now hardly feel. As soon as she could swallow, she took a draught of wine and water, in which fifteen drops of liquid laudanum were diluted; then she was put to bed, and in half an hour the violence of the discharge was considerably abated; when I introduced into the vagina a bit of sponge, dipped in a solution of alum, wine, and water. Having considered the case during this period, I directed her to take two spoonfuls of the following prescription, as often as the violence of the discharge should return:

R Infusio ros. rub. ꝑvi. Elix. vitriol. laud. liquid. ā gut. xv. in.

I likewise directed the sponge to be continued, and frequently moistened with this decoction:

R Cort. granat. querc. flor. balauft. ros. rub. ā ʒij. Coquantur in aq. fontan. ad. ꝑvi. In colatura solve alum. ʒss. & adde vin. rub. ʒij.

Next day she was much easier, the discharge being diminished and of a pale colour. For drink, I prescribed chicken-broth, in which rice had been boiled; with asses-milk to be taken morning and evening: for diet, veal, chicken,

chicken, bread-pudding made with the whites of eggs; and for change of drink, barley-water in which gum-arabic was dissolved, and water-gruel with eggs, in the manner of egg-candle. Though she recovered her strength by this method, the discharge returned at the end of the three weeks, but not in such quantity, nor for such a length of time. I directed her to use the same regimen, with moderate exercise; and after two or three periodical evacuations of the same kind, she perfectly recovered her health and bloom.

The same method I have successfully used with a great number of patients, both married and unmarried, only varying the medicines and the diet, according to the violence of the disease and constitution of the patient; and occasionally prescribing the cort. Peruvian. pilul. gummos. Spa, Bath, and Bristol waters, the two last kinds especially to be drank at the wells.

Those who are much weakened by floodings in miscarriages, or even in delivery, had sometimes, for two or three periods after, very large discharges, and were relieved by the means specified above.

What follows, concerning the immoderate flux of the menses, is copied from Dr. Dale's translation of Friend.

### C A S E I.

**A** CERTAIN woman, after a lying-in, was seized with an immoderate flux of the menses, which continued for six years; in the last two years the blood flowed almost daily, concreting sometimes into grum of the bigness of an egg. She laboured under a very great weakness and drought, and was also sometimes feverish; with a violent and continued pain in the abdomen and region of the uterus. She was seized with an anxiety at her heart, and sometimes also with a syncope. The pulse scarce perceptible. The intention of the cure seemed to be, after the stoppage of the flux, to restore the strength, which was extremely much decayed. But in checking the flux, since I thought proper to abstain from repellents, because their use seemed to be forbid, by the strength being so excessively weak, I trusted wholly to astringents, and them I ordered as well internally as externally.

R Cortic. granat. ʒss. Rad. tormentill. ʒj. Flor. ros. rubr. balaust. ā m. i. coq. in aq. ferrar. ꝑ ij. ad consumpt. ꝑ ij. Colatura sit pro fomentatione, bis in die parti affectæ tepide applicand.

For her common drink she used the decoct. alb. in ꝑ ij. whereof were boiled cinnamon ʒij.

Internally was applied the tinct. antiphthisica, so much commended by Etmuller, drawn from sacchar. satur. & vitriolum martis, with sp. vini. Of the tincture, she took twenty drops in aq. plantag. several times a day. When her pain or watching was troublesome, she took twenty drops of laud. liq. Two days afterward (Feb. 3) the flux was stayed; and, lest it might possibly return, the fomentation was repeated daily to February 6. But the flux being thus restrained, the pain and weakness seemed now to be regarded. I took, therefore, from the diætic medicine, broths and good nourishing foods; from the phamaceutic, the following mixture:

R Tinct. croc. laudan. liq. Sydenh. ā ʒij. camphor. in sp. vini. ʒss. Dissolut. ʒj. m. cap. gut. xxx. Sexies in die in aqua cinnam. fort. & hord. ā p. æ — with which her strength was very much repaired and



her pain abated.—Feb. 8, a sort of membranous pouch hung down from the labia pudendi, which yet adhered so firmly toward the uterus, that it could not be extracted from the vagina. It had also a very ill smell; and indeed, at first sight, the inner coat of the vagina seemed to be fallen down; for I then suspected it to be any remains of the placenta, because the woman denied that she had been brought to bed for six years. But when, upon considering the stench and the pain, I began to entertain some suspicion of a placenta, I thought it proper to examine into the matter a little more narrowly; and therefore enquired of the woman, whether she had not miscarried since that lying-in. She confessed she had been with child about two years since, and that, being terribly frightened, as she returned home in the night-time through the streets, she had miscarried by the way; but that, after she was returned home, she sent for no midwife to examine whether any thing was left in the uterus or not. From that time also the pain took its rise. The disease having been thus enquired into, the indication seemed to be this; namely, to restore the force of the uterus and abdominal muscles, so that it might expel any remains of the placenta; and because the mixture which was ordered her conduced very much to this end, she took forty drops of it several times in a day; by which medicine her spirits were so recruited, that, Feb. 10, some part of the placenta was thrown forth, not only of a very strong smell, but plainly putrid. Feb. 11, another portion was also thrown forth of the same ill scent. From that time there were no marks of that membranous substance within the vagina: in like manner also was the whole pain immediately allayed.—Feb. 13, she had so far recovered her strength, as to be able to sit up for some hours, after having been confined to her bed almost a month. She made no complaint of any thing but her weakness and loss of appetite. She took daily of her mixture, from which she found very great relief.—Feb. 17, the flux returned; which I was unwilling to check, because I found it very moderate, and attended with no ill symptoms; for it appeared to be the natural and ordinary evacuation of the menses; which was therefore ended on the fourth day.—Feb. 23. That I might farther provide for her strength, the following things were prescribed:

Rx Tinct. cortic. Peruv. (in vin. alb. ℥ iss.) Tinct. croci, spec. diamb.  
ā ʒ ss. m. cap. coch. vi. ter in die.

Feb. 25, her appetite was restored. Nothing was wanting to complete her health but strength; which, however, upon twice repeating the decoction, was also happily renewed.

## C A S E II.

A WOMAN of a full habit, and who had been used to have too great a discharge of the menses, fell into an immoderate flux, from excessive exercise, so that the menses came down in a large quantity; at first, indeed, for six days, and afterward for twelve.

When she had laboured under this indisposition the whole summer, her strength was very much cast down; she was often seized with a syncope and ipasm; her feet swelled; her countenance almost hippocratic; the blood being very thin, did not flow guttatim, but, as it were, in a continued stream. When I first visited her, the flux had continued four days.

The indication, therefore, of the distemper required that the flux should be immediately stopped. That this might be effected, the same fomentation was applied as is described in the first case.

At the hour of rest, she took the following hypnotic :

Rx Trochisc. Gordon. 3 fs. Laudan. Lond. gr. ii. Mucilag. gum. Arab. q. s. m. pil. exiguæ. cap. iii.

By the use of these she slept very quietly.—The next day (Sept. 11) the menses still flowing, this electuary was prescribed :

Rx Conserv. ros. rub. 3j. Bol. arm. croc. mart. astring. ā 3j. Mastich. ter. Japan. ā 3ij. Spec. diatr. santal. 3iv. Syr. e symphyt. q. s. m. f. elect. cap. q. n. m. 4ta quaque hora, superb. coch. 5. julep. seq.

Rx Aq. sperm. ranar. plantagin. cinnam. hord. ā 1℥ fs. Syr. e coral. q. s. m. f. julep. cap. etiam. ter in die spir. vitriol. gt. xl. in quovis vehiculo.

Repet. foment. & pilul. præscript.

Sept. 13, the flux still continued, although only guttatum ; which yet, upon her duly taking the medicines, on Sept. 15, wholly ceased.

Now, therefore, the whole method of cure seemed to turn upon this point, namely, to strengthen the vessels and prevent the rarefaction of the blood. To answer the first intention, the fomentation was every day repeated ; the use of glutinants and balsamics seemed sufficient for the second : astringents being therefore set aside, the following method was pursued :

Rx Decoct. alb. 1℥ ij. Aq. cinnamom. hord. 3iij. Sacch. alb. q. s. m. cap. 3iv. quater in die.

Rx Bals. capiv. polychrest. ā 3ij. cap. gt. xxv. hora decubitus in conserv. rosar. rub.

Upon the taking of these remedies, after the interval of almost three weeks, Oct. 5, the menses returned, and continued so for six days. But the last prescriptions being repeated the next period, the flux was terminated the fourth day ; which stopping hitherto within the same space of time, the woman was thereupon perfectly recovered.

### C A S E III.

A WOMAN thirty-six years of age, after a miscarriage, had a flux of the menses during fourteen days, for three periods ; afterwards for almost three months they came down daily. By which flux she was so weakened, that she could by no means walk, and but scarce stand. She drew her breath with so much difficulty, that she was in danger of being suffocated. She was seized sometimes with a syncope, and sometimes with an hysteric fit ; so that she lay for an hour or two as if she was dead. The same pale colour and leanness as in consumptive persons ; the pulse weak and intermitting.

The indication of cure seemed to regard, first, the stoppage of the flux, and then the restoring of the strength. The fomentation was therefore made use of which is described in the first case ; which indeed I generally found to be efficacious. Inwardly she took twenty drops of spirit. sal. dulc. in decoct. tormentill. four times a day.—Four days afterward (May 25) the flux something abated, although it broke out again every day. The following emulsion was ordered, in the room of her common drink :

Rx Amygd.

R Amygd. dulc. excorticat.  $\bar{z}$ i. sem. iv. frig. maj.  $\bar{a}$   $\bar{z}$ ij. quibus in mortario confusis affund. aq. hord.  $\bar{f}$ ij. Colaturæ add. sal. prunell.  $\bar{z}$ ij. fyr. althææ q. f. m.

May 30, the flux was stayed; however, it broke forth again the next day in the evening. But by the continual use of the remedies prescribed, the flux was so regulated, that from June the 3d to the 9th, it was wholly stopped; afterward, at the month's end, it returned at the usual periods. The flux being therefore restrained, and the canals sufficiently closed up, the other indication was pursued after this manner:

R Cortic. Peruv.  $\bar{z}$ j. Rad. zedoar.  $\bar{z}$ fs. Cochinell.  $\bar{z}$ ij. Digerantur cum vin. alb.  $\bar{f}$ ij. tepide per triduum. Liquoris filtrati cap. ter in die  $\bar{z}$ ij. in quolibet haustu instillantur tinct. serpent. virg. gt. 20.

At night, because she was often sleepless, and sometimes also hysteric, she took the following paregoric pills:

R Galban. col.  $\bar{z}$ j. spec. diamb. castor. camphor.  $\bar{a}$   $\bar{\theta}$ fs. Laudan. Lond.  $\bar{\theta}$ i. m. f. pill. 20, cap. 2 ante decubitus superb. tinct. præscript. coch. 4.

Let her diet consist of very nourishing food.

July 19, her stomach, which had been hitherto disordered, was much strengthened, and her strength also somewhat confirmed. At the beginning of August, the woman, by following the method prescribed, was perfectly recovered.

Forestus de Mulierum Morbis, lib. xxviii. has nine observations on the too great flux of the menses.

Vide Zacut. Lusitan. tom. i. lib. iii. p. 479, and tom. ii. lib. iii. p. 487.

Vide Mr. Stead's case in the following number.

### N U M B. III.

#### OF THE FLUOR ALBUS.

AS Hoffman has treated largely on the fluor albus, I have inserted an abridgment of the following cases, from that part of his works where he treats De cachexia uterina, sive fluore albo.

#### OBSERVATION II.

IN a woman about thirty years of age, of a tender constitution, living near the sea a sedentary life, and on a diet of difficult digestion, as sea-fish, especially oysters, the discharge of the menses had for a year been irregular and in small quantities; she was much afflicted with the fluor albus; her countenance began to turn pale, with great lassitude both of body and mind. He first ordered a vomit of rad. ipecacuanhæ  $\bar{z}$ fs. tartari vitrioli  $\bar{\theta}$ fs. to be taken twice a week; after that to take, once a week, a dose of opening pills, which were composed of some bitter extracts, gums, and rhubarb; and, in the intermediate days, three or four ounces every morning of the following stomachic wine:

R Rad. zedoar. calami. aromat. enulæ  $\bar{a}$   $\bar{z}$  fs. Herb. absynth. rorismar. marub. alb. menthæ, salviæ, centaur. minor.  $\bar{a}$  m. j. Baccar. junip.  $\bar{z}$ j. infundantur in vini Canariensis mensura una & dimidia. Coletur usus tempore, & per mensem hæc cura continuetur.

He advised her also to take frequent and moderate exercise, to eat things of easy digestion, and shun the contrary. By this method he cured many, where the disease proceeded from a bad digestion, and not of long standing, or had not degenerated into a bad habit of body.



## OBSERVATION III.

A WOMAN past thirty, of a clean habit, for more than a year, after she had miscarried three times, was taken with a troublesome fluor albus; the menses were irregular, and sometimes in a large quantity. He ordered her some of his opening balsamic pills, to be taken for three nights, and each morning about three ounces of aperient wine. The same days he ordered her a bath, made with soft water and strengthening herbs, with a bag of the same herbs, applied over the region of the groins. After the intermission of three days, the same things were again administered for three more, and repeated in the same manner a third time, with fresh herbs each time. Then he ordered the uterus to be fumigated with frankincense, mastich, and amber; and the patient to live regular. By which method not only the bowels, but also the uterus, was purged of a large quantity of humours.

By the same treatment he recovered many others under the same complaint, as well as the above patient. He farther observes, that it is not only necessary to purge the body of viscid serous fluid, but also to strengthen the relaxed uterus, which is too much loaded with viscid humours, by the use of the above baths, made more efficacious with nervous and aromatic herbs. And because, for the most part, this disorder is the occasion of barrenness, the above method is most probable to remove the same.

## PART III. OBSER. V.

A YOUNG woman, twenty years of age, of a delicate constitution, and who indulged in a sedentary life, after a difficult labour, in which the placenta was pulled away with a great deal of force, was seized with an acute pain. The lochia afterward did not flow so freely as they ought. Ever since, she laboured under a fluor albus, which increased so much as to weaken her vastly; she was more and more emaciated every day, and her legs began to swell. He observes, that he had frequently found in practice such violent treatment was the occasion of the like complaints.

She was prescribed some balsamic and nitrous medicines, and ordered to drink with her victuals a decoction of mastich, with some cinnamon and wine mixed with it. The parts were likewise fumigated with sandaric, mastich, benzoin, and cinnabar, and fomentations of nervous medicines boiled in wine often applied to the inguinal region. This method, with an exact regimen of diet, had the desired effect.

(From Mr. Pearce's Bath Memoirs, p. 219.)

A MARRIED woman, aged thirty-seven years, having for a long time laboured under the fluor albus, which at first was only white, afterward yellow, then greenish; after that dusky, towards a black, and then interspersed with red, was cured by some time bathing in the Bath waters, drinking them, and taking some gentle balsamic astringents along with them; while at the same time she threw up into the uterus some of these waters, with some mel rosarum. In this section, there are three other cases of women cured by drinking these waters and bathing.

*Vide* Forestum de Mulierum Morbis, lib. xxviii. where he gives five cases on the fluor albus.

*Vide* Boneti Sepulchrenum de Fluore Muliebri, lib. iii. sect. xxxvi.

## A CASE FROM MR. STEAD, OF GUY'S HOSPITAL.

A GIRL of a florid complexion, and eleven years of age, about three years and a half ago, had her menses come down in a small quantity, of a proper red colour, and which continued upon her several succeeding weeks; then stopped and returned afterwards in a regular manner once a month, till within these three weeks last past; during the greatest part of which time, she has had a flooding. Two or three days after the first stop of the menses, it was discovered she had the whites, and has been subject thereto ever since; the colour is white, has of late been thin, and so sharp as to excoriate the parts intra labia. She was suspected to be clapped; but both she and her mother solemnly declared no man had ever touched her; and this was confirmed by the extreme narrowness of the mouth of the vagina. No particular cause of this early appearance of the menses could be found out; unless these be admitted, that she had at that time a violent fit of crying, and might perhaps have been weakened, and received a wrench in the loins, by having been compelled to carry large heavy children in her arms. Some time before, and after her admission into the hospital, she had such a constant uneasiness, smarting pain, and sense of bearing down about the vagina and privities, that she could not walk or lie in bed, except cross-legged; which position of the parts was tolerably easy to her. She complains of great weakness across the loins, and has an almost unextinguishable thirst, and is regular in stool. In these circumstances the physician directed as follows:

R Gum. oliban ʒss. Mellis q. f. solut. adde aq. lact. alex. ʒj ss. Mirabil. fyr. bals. ā ʒij. f. haust. omni nocte & mane sumend. & R Decoct. c cort. Peruv. ʒij. Elix. vitriol. gr. xx. f. haust. quotidie hora xima matutina & vta vespertina capiend.

After the use of which between two and three weeks, she being rather costive, a gentle purge was judged necessary; as,

R Infus. sen. ʒj ss. Mann. ʒvi. Aq. mirab. ʒij. f. haust. pro re nata assumendus.

These agreed perfectly well with her, the menses profluvium was soon stopped by the astringents, and the external foreness removed by fomenting the parts night and morning with warm milk, and afterward gently anointing them with some of this liniment:

R Ol. almygd. dulc. ʒj. Sperm. ceti. ʒjss. Ceræ alb. ʒss. m. f. linimentum.

Little or no check was however given to the whites by two months' use of the internals; and thereupon they were at that time left off for these pills:

R Pil. ex duobus gr. xii. Calomel. ppt. gr. iv. f. pil. ij. bis in septimana cum levi regimine capiend.

R Terebinth. venet. ʒij. Pulv. glycyrrh. q. f. f. pil. mediocr. quarum capiantur quatuor ter de die in quovis vehiculo.

The purging pills operated immediately; and, together with the others, were persisted in about eight weeks, the flux gradually abating thereby, except for the last three weeks, during which it seemed to be at a stand, and was so considerable as to induce the physician to endeavour to put a total stop to it; which he attempted and succeeded in by five weeks' repetition of the olibanum draught, as directed above; and she was accordingly presented out well.

It would be unnecessary to insert more cases of this complaint; though it may be useful to make some general remarks on the methods which I have found successful in practice.

I have found this discharge beneficial to those who were obstructed or irregular in their menses; but this benefit was more or less, according to the quantity of the evacuation: and the fluor albus is diminished by all those methods that are used in removing obstructions:

Indeed, where this complaint was owing to a weak and lax habit of body, I have found it relieved by the method of cure recommended in the immoderate flux of the catamenia; and although I have generally succeeded in both cases, I have met with some patients who, from the long continuance of the disease, could not be radically cured.

I have had several patients where this discharge diminished on the cessation of the menses, about the age of 45 or 50, and in a few years afterward entirely stopped of itself. Some of them for ten, fifteen, or twenty years, from the tumefaction, excoriation, and foreness of the parts, could not, till after the above cessation, converse with their husbands.

*Vide part i. book i. chap. iii. sect. i.*

## COLLECTION V.

*Of labour without any previous sensible motion of the child, and extra-uterine fætuses.*

[ *Vide Part i. Book i. Chap. iii. Sect. ii and iii.* ]

### N U M B. I.

#### LABOUR WITHOUT THE MOTION OF THE FÆTUS.

A WOMAN turned of thirty, after having boren three children, inclining to be corpulent, found the menses obstructed; but, far from ascribing this obstruction to the true cause, imagined it was the consequence of her growing fat, especially as she had never felt any thing like the motion of a child. In this way she continued till the seventh month, when I was consulted about removing the obstruction, though she would not allow me to examine in a proper manner. Finding her in good health, though fully persuaded that her bigness was either owing to corpulency or a dropsy, and bent upon having the obstruction removed, I prescribed some gentle opening medicines, as she was naturally costive. I was again consulted in the eighth or ninth month, when she still declared that she felt no motion; and obstinately adhered to her former opinion. At last, however, I was called to relieve in a supposed fit of the colic; and reached the place of her abode just time enough to receive the child; though she would not be persuaded of her real situation until she actually heard it cry, because she had never felt it stir, either before, or in time of the labour-pains. I have delivered many women of strong and lively children, after they were fully prepossessed with a notion that they were dead, because they had felt no motion in time of labour.

In some cases, I have imagined the labour was brought on by such motion; but have generally found that the pains did not follow this motion; and after the children were certainly known to be dead, I have delivered



a number of women with as much ease as when the children are alive. The only obstacles I ever found in the delivery of dead children were the tumefaction of the belly, from the rarefaction of the contained air, that rendered the labour a little tedious, and a large head or narrow pelvis, which would have been attended with the same difficulty, had the children been alive or the body not tumefied.

## N U M B. II.

### OF EXTRA-UTERINE FŒTUSES.

**I**N the Philosophical Transactions, No. 323, p. 426, there are accounts of some extra-uterine fœtuses, both of the human and brute species, by Mr. J. Younge. With regard to the human, he says, extra-uterine embryos have been sometimes found in women, but not publicly taken notice of till the beginning of the last century. The younger Riolan, speaking of the Fallopian tubes, says, they appear of the same nature and substance as the womb, *quia carnosæ est in quâ, quod est mirabile fœtum humanum concipi, fuit observatum*. Then gives an account of four such strange conceptions which occurred to his knowledge.

He likewise observes, since that time, more strange ones have happened in that country. One was found at Paris, by Mr. L. Vesalius, in the tube of a woman. It was four months old, and so grown, and the tube so distended, as made him mistake it for another womb, and accordingly to call the account he published thereof, *Demonstration d'une double Matrice*. Mr. Oldenburgh inserted an extract of it in the Philosophical Transactions, No. 48, and the German Academy, vol. i. obs. 110, did the like; but neither seemed to understand the mystery, till De Graaf took it right, and made use of this very observation to illustrate and confirm the hypothesis of Kirkringius. About ten years afterward, a more wonderful and incredible one happened there. It comes very well attested by Dr. Bayle, who first published a history of it in the Journal des Scavans, and, after, Mr. Oldenburgh put an extract of it into the Phil. Trans. No. 139, p. 979. This case is taken from the above, and not from Mr. Younge.

Margaret Matthew, wife of John Puget, shearman, at or near Toulouse, being with child, perceived, about the end of the ninth month of her bearing, such pains as women usually have when about to fall in labour. Her water also broke, but no child followed. For the space of twenty years she had perceived this child to stir, with many troublesome symptoms accompanying; but for the last six years, she perceived not the child to move. She died, and the next day, being opened, a dead child was found in her belly out of the womb, no way joined or fastened to it; the head downward, the buttocks hanging toward the left side. All the back part of the child was covered with the omentum, which was about two fingers thick, and stuck hard to divers parts of the body, so as not to be separated without a knife, which being done, very little blood issued. This infant weighed eight pounds avoirdupoise; the skull was broke into several pieces; the brain of the colour and consistence of ointment of roses. The flesh red where the omentum stuck; other parts whitish, yellowish, and somewhat livid, except the tongue, which had the natural softness and colour. All the inward parts were discoloured with a blackishness, except the heart, which was red, and without any issuing blood. The forehead, ears, eyes, and nose, were covered with a callous substance, as thick as the breadth of a finger. The gums being cut, the teeth appeared in the adult-  
ness

ness of those in grown persons. The body had no bad smell, though kept three days out of the mother's belly. The length of the body, from the buttocks to the top of the head, about eleven inches. The mother died about the 64th year of her age.

Mr. Younge goes on, and says, that before either of these appeared in France, there happened one in Holland to H. Rhoonhuys. A woman with child, at her full time, was four days in labour, and, although she had many midwives, could not be delivered. Our author was called, found the internum uteri osculum close shut, without flowings, or any fore-runners of the delivery. He, finding the common passage so closely shut up, and a very painful tumour above the navel, proposed the Cæsarean section. The woman having seen that operation made at Paris, earnestly desired him to perform it on her; but he, to observe some unnecessary forms, delayed it till the woman died; who, he believes, with the child, might have been preserved, if the operation had been done when he first saw her. Opening the belly, he found a child among the entrails, and the placenta fastened to the colon, and part to the fundus uteri, and that there was a breach in the womb, capacious enough for the infant to pass through into the belly. T. Bartholinus, the year after Rhoonhuys's exploration, met with such an extraneous fœtus wrapped up in a mola, which he found in the belly of a woman, and conjectures, *non possum aliud divinare, quam quod fœtus hic primo in tubis uteri conceptus*. He imparted this first to G. Horstius, Ep. 58, vol. iv. afterwards in the 92d observation of his sixth century.

In the city of Aurange, D. Baldwin and Mr. Delafort, found *puellum ægregium optime formatam extra uterum*. The report of this discovery is made public by Sachs, with remarks, Miscell. Cur. vol. i. observ. 110. which he concludes with one more stupendous than all I have cited, which he had from the Silesia Chronicle, written long since by N. Polinus, and thus relates it:

A woman who had boren ten children in fifteen years matrimony, conceived again; and, at the full time, was delivered through an abscess of the left hypochondria: *ex qua infans boni habitus extractus, qui baptizatus fuit, & annum unum cum dimidio supervixit; mater vero, summis in doloribus tertio die obiit*. He also, at the beginning, gives an account of a gentleman's servant having killed an ewe which was thought fat, and having taken out the bowels, found a very unusual and monstrous lump of fat, proceeding like a wen from the middle of the omentum; and when opened, a lamb was found in the same. He likewise relates, that, thirty years since, he had been shewn the like in a bitch. He was also told by a gentleman-hunter, that he lately found in the paunch of a hare, two full-grown young ones amongst the bowels, but almost rotten, and three immature embryos in the uterus.

There is also, in the Philosophical Transactions, one case that seems to be published by two different persons, of near the same date, at Paris; the first is by Mr. Saviard, No. 222, p. 314; the second is by Dr. Ferri, No. 231, p. 121; which last I have copied as being the fullest:

A goldsmith's wife, near nine months gone with child, was received into the Hotel Dieu. She was about thirty-four years of age, of a tender constitution; had had four children before, all which had done very well; but with the present she had been very ill, and endured a great deal of misery. The midwife who examined her body, found a considerable swelling on the right side near the navel, which very much resembled a child's

head; her belly below that place bearing no proportion to that above, or to the time of her pregnancy; on the left side there was nothing singular. The midwife thought she felt, through the vagina, a thick membrane filled and distended with water, and in it the heel of a child bent toward the thigh; but she could not be assured whether this was within the womb or not, by reason the inner orifice was drawn so high under the os pubis, she could not without some difficulty touch it with the extremity of her finger. Upon trying some time after, she could not discern any thing like the foetus she had felt before. The patient told her, that for the first six weeks after her being with child, she had great and continual pains, which shot toward the navel, and terminated there; and these lasted till the third month; that from thence to the fifth she had frequent convulsions, apoplectic fits, and terrible syncope, so that those about her despaired of her life; that from the sixth to the eighth month, she had enjoyed much better health, which in some measure had strengthened her and her infant; that the pains she had endured since that time seemed to be so many alternate throws, probably proceeding from the repeated strokes of the child's head in that place, where the teguments were so thin, by reason of their great extension, that the hardness of the cranium could plainly be discerned through them. In this condition was this miserable woman when she was received into that hospital; till, her affliction increasing, she could neither lie on her sides or back, being forced to sit on a chair, or kneel in her bed, with her head resting on her breast. These strange and unaccountable symptoms obliged the midwife to consult with the physician and master-surgeon of the house, who thought it was best to leave the work to nature, and prepare the woman for labour by opening a vein in her foot. The evacuation was ordered to be small, in which regard was had to the weakness of the patient, and the delicacy of her constitution. However, after this time the child made no efforts, and the tumour subsided, there remaining only an hydropic indisposition, which might be perceived by the fluctuation; and a great quantity of water came away for several days, from the orifice of the vein, insomuch that she who seemed to have her lower belly and thighs extremely distended, was very much emaciated before her death.

After her decease, her body was opened by M. Jovey; and upon the first incision through the teguments, there came away two or three pints, Paris measure, of water and blood, and there appeared the head of a child naked. When the parts were all laid open, there was found an entire female foetus, contained in a cover or bag, which at once served it both for a womb and membranes. M. Jovey took the child and umbilical string out of the mother's belly, tracing the string to the placenta, into which it was inserted. This last appeared like a great round lump of flesh, and adhered so firmly to the mesentery and colon on the left side, that it could not be separated from them without some trouble. On one side of this lump was a lesser, about the size of a kidney, which principally adhered to the mesentery, and received several branches of the string into it. The larger lump was round, and the greatest part of it adhered to the bag or case which contained the child. This case or bag was corrupted and mortified in part, which probably might proceed from the frequent strokes of the infant's head. It sprung from the edges of the tube or fimbria of the right ovary, which was more entire than the left, and proceeded obliquely to the left side, terminating at the bottom of the pelvis. In its descent it sent out a small portion between the womb and the rectum. This bag, by compressing the neighbouring parts, had gained a considerable space in the above-mentioned cavity



cavity, in such a manner that a great part of the child's body was lodged at the bottom of it, in a bended posture, with the head projecting forward, which formed the prominence near the navel. This bag seemed to be nothing else but an elongation and distention of the tube, and an expansion or production of the broad ligament on the right side; which was evident from its continuity to these parts, and the distribution of the spermatic vessels, which were larger than usual, and passed from the extremity of the tube to the larger lump. The womb was entire, and in its natural state, except that it was something larger than ordinary, being about the size of that of a woman ten or twelve days after delivery, and no marks that the child had been lodged in it.

M. Jovey having observed this, thought proper to desist till several eminent physicians and surgeons were called; and then the womb being carefully dissected, it was unanimously agreed, that the fœtus had never been in it; it being, as it was noted above, in the same state as in women who are not with child, except the small dilatation of its bulk, which might arise from a compression of the vessels, and interception of the reflux blood, by the unnatural position of the fœtus. In thrusting a long and slender probe through the right horn of the womb, it easily passed into the tube on the same side for three fingers breadth in length, but it could not be thrust farther, by reason of the constriction of the tube in that part. The capacity of the tube could not be distinguished; the parietes of it, by their coalition with the chorion and amnios of the child, forming the bag in which the child was inclosed, which extended from the tube on the right side to that on the left, and was agglutinated to the viscera of the lower belly, the rectum, and to the back part of the womb, as appeared by some fragments remaining on those parts after the separation.

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*A fœtus in the right horn of the uterus. By Dr. Ferri, No. 251, p. 125.*

**I**N dissecting the body of a woman, who supposed herself to be three months gone with child, I found the womb very small, not larger than in virgins, and a hard substance in the right horn; which being opened, appeared to be the skeleton of an infant, with the navel-string smeared round with a white matter not unlike plaster.

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*In the Phil. Transf. No. 378, p. 387, an extra-uterine fœtus that had continued five years and an half in the body. By Robert Houlston, M. D.*

**I** Was sent for to a woman near Newport-Market, who had been married eighteen years to a native of the East-Indies, by whom she had eight children, besides two miscarriages. At my visiting her, she was with child in a second marriage, and her husband a vigorous young man. She was near her full time, and had felt pain for several days, which, returning, by intervals, she concluded would, as usual, bring on delivery. Her mother and her midwife apprehending no difficulty, assured those about them that only time was wanting; but I found, on examination, that her womb was of no bulk to contain a child near its time; and that its neck, which was of an uncommon hardness, was also closed so straitly as to refuse the admission even of a small probe or knitting-needle. I declared upon this that her delivery was impossible, because the child was not within the womb, but between the womb and the guts; but that it might be removed by a passage to be made for it, without any great pain, and

and with safety to the mother. I offered to undertake it; and assured them that this was the only opportunity, and that if she neglected it, it would be out of the power of art hereafter to give her any relief; for she must languish till death, unless favoured by some unlikely and extraordinary accident. However confidently I affirmed it, they listened with a mixture of disbelief and amazement, and rejected my assistance. At that time, in all probability, it would have been successful; for she was a slender well-shaped woman, in good habit of body, and of a sprightly disposition.

It was a year after this when I was desired again to visit her. I found her much disordered by a growing imposthume in her belly. I ordered her some cordial stomachics, cassia, and such gentle lenitives; and they met with success beyond my expectation; so that by aid of a regular diet, and the watchful exactness of a very tender mother (a nurse of about thirty years' experience about this city) I restored her to such strength, that she went cheerfully abroad, and applied herself to business.

About fifteen months after the time when I visited her first, her mother came from her to intreat my assistance: she complained of great pain in the lower part of her abdomen; and I found a tumour of a conic form, projecting about an inch beneath the umbilicus; its inflammation, with tension and a feverishness attending it, so plainly indicated suppurations, that I was not surprised to hear in a few days that it had broke as I wished. I proposed to lay it open, both to give a free emission and prevent its becoming fistulous; but she was apprehensive that I would, as she called it, cut open her belly: so that not being able to prevail with her, I ordered her a pot of unguent, and some plasters. The ulcer soon grew fistulous, and so continued till she died, which was in the 41st year of her age.

For above five months before her death, she voided her excrements by this vent; and all the soft parts of the fœtus, with some small bones of its fingers. But the rest of the skeleton remaining entire, I took it out of her body, together with the vagina, uterus, rectum, &c. wherein it had involved itself.

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*A fœtus formed in the ovarium. By M. de S. Maurice. Phil. Trans. No. 150, p. 285.*

A WOMAN, after being safely delivered of eight children, and continuing five years afterward without having any more, about three months before her death suspected herself to be fallen into that condition again; because she never before failed of being very regular, and had not found herself so for more than a month. After this, she had a little show, which scarce left off wholly during the two last months of her life, and which she passed, nevertheless, without much trouble; so that she thought herself to be secure as to the point of her being with child. But, after she was up one morning, in very good health, she fell into faintings, had violent pain, like the colic, in the region of the right groin, which terminated at the reins, a little after eight in the evening. She felt all the præludia of an imminent travail; she called her surgeon, and died in his arms, saying, "I am delivering, I am delivering;" there appearing outwardly neither distillation nor flooding, nor any mark of this disorder.

On opening the integuments of the belly, all the entrails of the epigastric region were seen floating in blood, which was taken out with a spoon, to the quantity of two pounds. To avoid changing the situation of the parts,  
a large

a large quantity, which was coagulated, still remained in the right flank ; and trying to take this out with the hand, a little fœtus was found in the first clots, about the bigness of a man's thumb, and a third less in length, all very distinctly formed, and in which was manifestly discovered the sex of a boy, but naked and without covering. The right cornu of the womb was found near this place ; the testicle, or ovary, was torn longwise, and through the middle on the side, that it did not touch the tuba. This testicle was near the bigness of an hen's egg, and seemed to be the place where the fœtus was contained, and which had burst through the same, for the left testicle was no bigger than a small chefnut : the tube was not dilated, neither was there any rent of the uterus, which appeared to be in its natural state, and was as Dr. Harvey had described it in the first month of pregnancy ; but when it was opened, he found not the least sign of conception ; the vessels of the interior membrane seemed full of blood and varicous, which might be the cause of that little show of blood, as before mentioned.

He remarks, that although authors speak of fœtuses found in the tubes and belly, he does not know any that mention their being in the testicle or ovarium, as this seems to have been.

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*In the Phil. Transf. No. 367, p. 126, a fœtus that continued 46 years in the mother's body. Communicated by Dr. Stegertabl.*

**A**NNA MULLEEN, of the village of Leinzelle, near Gemund, in Suabia, of a dry and lean constitution, but otherwise healthy and robust, died at the age of ninety-four, after she had lived a widow forty years. Forty-six years before her death, she declared herself to be with child, and had all the usual tokens of pregnancy. At the end of reckoning, the waters came away, and she was taken with the pains of labour, which continued upon her about seven weeks, and then went off, upon the use of some medicines given her by a surgeon. Some time after this she recovered her perfect health, except only that her belly continued swelled, and that now and then, upon any exercise, she felt a little pain in the lower part of it. She was after this twice brought to bed ; the first time of a son, who is now a huntsman at Bischoffsheim ; and afterward of a daughter, who is married to a soldier. But notwithstanding this, she was firmly persuaded that she was not yet delivered of what she first went with, and desired Dr. Wohnlix, the physician of Gemund, and one Knaussen, a surgeon at Heubach, to open her body after her death. Accordingly, after her death, which happened after four days illness, her body was opened by the surgeon, the physician before-mentioned being dead. He found within her a hard mass, of the form and size of a large nine-pin bowl, but had not the precaution to observe whether it lay in the uterus or without it, and, for want of better instruments, broke it open with the blow of a hatchet. This ball and the contents of it are explained in the figures of the Transactions ; and, according to the description and appearance, seem to have been so strongly pressed, that the parts were consolidated to one another, and the integuments in a manner ossified. The nose was turned up and flattened, and the eye closed ; but the ear, the arms, of which the right is the largest, and the two joints of the thumb, &c. are plainly distinguishable.



*An account of a child taken out of the abdomen, after having lain there upwards of sixteen years, during which time the woman had four children, all born alive. By Starkey Middleton, M. D.*

GENTLEMEN,

THE records of your society furnish us with several cases of extra-uterine conceptions, one of which I communicated to you, March 28; 1745. Nevertheless, I could not help flattering myself, that this case also might be worthy your notice.—In April, 1731, Mrs. Ball, without Bishopsgate, perceived, by the usual symptoms, that she was pregnant; and, in October following, being then in the sixth month of her pregnancy, she had a child died in her lap of convulsions; the surprize of which caused a great fluttering within her, attended with a sensible motion of the child; which motion continued, though gradually weaker and weaker, for about six or seven days, after which she did not perceive it move any more; but from this time she had constant pains attending her, which appeared like labour-pains. Her midwife for several days expected a miscarriage; but finding herself disappointed, advised her to apply to Dr. Bamber, whose known abilities, in the several branches of physic, joined to his great experience and judgment in midwifery, made him unquestionably the most proper person to be consulted, as the case appeared so very uncommon in its circumstances; at the same time that his great humanity always gave the most free access to the poor in their distresses. The doctor, after a proper examination, finding sufficient indications of a dead child, ordered her some forcing medicines; upon taking which about three times, she discharged something, which the women supposed to be part of the after-birth, accompanied with a small quantity of water. In consequence of this discharge, her pains ceased, but without any diminution of her belly. After some time, she again applied herself to the doctor, who thought it most adviseable to discontinue her medicines, and leave the affair entirely to nature. In this state she continued for about twenty months, viz. to July 1733, which was two years and two months from her first reckoning; she then again applied to Dr. Bamber, acquainting him, that she was not yet delivered of the child she so long since came to consult him about, and that her pains were lately returned, and daily increased without intermission. Upon the doctor's examining her, he thought it proper to send her home immediately, directing her to promote her pain by frequently sipping some warm caudle, &c. by the use of which her pains became more regular; and the next day the doctor made her a visit, and was informed she had discharged two waters, but nothing more: he then carefully examined her again, and plainly felt a child through the integuments of the abdomen, but could not give her any assistance.

It was about this time Dr. Bamber first acquainted me with the case, desiring me to attend her as often as occasion might require; and that I would acquaint him if any thing like labour or other remarkable alteration should offer. Accordingly, I made her a visit, and after a proper examination, was convinced of the certainty of the doctor's assertion. Her pains now began to abate, and she grew tolerably easy; but about the latter end of January 1733-4, she conceived again with-child, and was delivered the 28th of October following by Dr. Bamber, who sent for me to attend him in her labour: the doctor soon delivered her of a fine boy, and after having brought away the placenta, he searched for the other child, which he had before felt through the integuments of the abdomen, but found it lodged in the

the cavity of the abdomen, and beyond the reach of human art to relieve her. This fact every one then present was made sensible of.

October 22, 1735, I was sent for to her in her labour, but before my arrival she was delivered of a boy; however, I brought away the placenta, which gave me an opportunity of examining for the other child, and found it in the same situation as formerly.

October 9, 1738, I was again sent for to her when in labour, but she was delivered of a boy before I arrived. Upon examining the womb, and the state of the abdomen, the child appeared just as before, without any alteration.

June 17, 1741; I was again sent for in her labour, but found her just delivered of a girl; and, upon examining the parts, every thing appeared as before.

October 14, 1747, being greatly emaciated by constant pains, &c. she was admitted a patient in Guy's Hospital, where she died the 7th of November following, after having laboured under the distresses and uneasiness of carrying a dead child within her, in a manner loose in the abdomen, upward of sixteen years. The day after her death, I opened her in the presence of doctors Nesbit, Nichols, and Laurence; when the uterus, and the several other contents of the abdomen, appeared nearly in their natural state; but on the right side, within the os ilium, a child presented itself, which was attached to the ilium and neighbouring membranes by a portion of the peritoneum, in which the funbria and part of the right Fallopian tube seemed to lose themselves. The child seemed no-wise putrid; but the integuments were become so callous, and changed from their natural state, that the whole seemed to resemble a cartilaginous mass, without form or distinction; the legs, indeed, were distinguishable, though they were much wasted and distorted. Upon opening the callous integuments of the head and face of the child, the bones appeared perfectly formed, with a few spots of tophous concretions on them. This account may serve to convince those who are of opinion that boys are conceived on the right side and girls on the left; as this woman had three boys and one girl after the Fallopian tube on the right side had lost its action.

Your's, S. MIDDLETON.

In the Memoirs of the Academy of Sciences at Paris, M. 1702, p. 234, &c. we read of a foetus extracted by the anus; and in H. 1722, p. 20, of one found in the Fallopian tube. The German Ephemerides, an. prim. l. iii. observ. cx. mentions a foetus lying betwixt the uterus and rectum; and tom. iii. observ. xi. describes another found in the abdomen of a woman, where it had lain above sixteen years.

In the Med. Essays of Edinburgh, vol. v. art. 38, is the history of one child extracted by an opening in the abdomen, and part of another passed by stool; by Dr. Gabriel King, physician at Armagh, Ireland.

## COLLECTION VI.

*Of super-fœtation, or what was formerly supposed to be so.*

[ Vide Part i. Book i. Chap. iii. Sect. vi. ]

## C A S E I.

**I** WAS called to a woman in the country, who was seized with a violent flooding in the fourth month of her pregnancy; and before I reached her house, which was about four miles distant from the place of my habitation, she had miscarried of a small fœtus and the secundines. The discharge was abated; yet, as she had been before delivered of twins, at three different times, I examined the vagina, and found the os internum so much contracted that I could hardly introduce the top of my finger. The neck of the womb seemed to be about half an inch long; and above that I felt a pretty large stretching of the uterus on the sides and anterior part. As she had rested little the preceding night, I prescribed a paregoric mixture, with thirty drops of liquid laudanum, two spoonfuls of which she took every two hours, until some slight pains that still remained were removed, and she fell asleep. In two days she was perfectly easy, and in about three months after this period her husband brought her to my house, where she told me she had been irregular in the discharge of the menses since her miscarriage, and was grown very big; a circumstance she imputed to a dropsy, or rather a tympany; for she found frequent motions from wind. By examining the abdomen and vagina, I plainly perceived she was in the eighth month of pregnancy, and assured her the wind she felt was no other than the motion of a child; observing that she had probably conceived two children as formerly, and though she had miscarried of one, the other had remained, and would continue to the full time. My prognostic was verified in about nine weeks, when she was delivered of a full-grown female child.

## C A S E II.

**A**BOUT three years after this transaction, my assistance was demanded to a woman, who, in the sixth month of her pregnancy, was also taken with a flooding, though in a small quantity, which continued ten days before I was called; some water was likewise discharged without pain, and yielded a mortified smell. I understood, that the day before I was consulted, she had felt some slight pains, and a few small bones had been discharged from the vagina; and these, upon examination, proved to be the bones of the legs and arms belonging to a fœtus. I could scarce introduce the tip of my finger into the os internum, though the neck seemed larger than usual, and above that the uterus was pretty large. The cloths, that were moistened with a serous discharge, exhibited a brownish colour, and had a putrid smell. The woman was much alarmed, her spirits were sunk, she had for some time enjoyed little or no rest, and was coſtly. I ordered an aperient clyster to be immediately injected, after the operation of which, I directed her to take ten grains of the pil. Matth. and next day four spoonfuls of the following mixture, every six hours:

Rx Aq. Puleg. ʒvj. Bryon. comp. ʒj. Tinct. castor. gutt. c. Spt. c. c. gutt. lx. Syr. caryoph. ʒj. M.

I like-



I likewise directed the clyster to be repeated every afternoon, and the pills every night, if there should be occasion, and found her perfectly easy and free from all complaints, and was told she had the preceding night discharged the rest of the bones and secundines of a child. I insisted upon her keeping her chamber and bed for some days, and prescribed a cordial mixture, with some doses of sperma-ceti, at the request of her female acquaintance.

About two months after this disorder, I received another call, when she told me her stomach was stuffed up with wind, that she was taken with a violent colic, and had been three days without passage in her belly. When I felt the abdomen, as she was a thin woman, I could plainly perceive a stretching of the uterus, extending above the navel; and upon examining by the touch, in the vagina, felt the os internum largely opened, the membranes with the waters pushed down, and through these the arms, shoulder, and navel-string of the fœtus. She was agreeably surpris'd when I told her she was in labour of a child, though in the seventh or eighth month; then being put to bed, and the female friends assembled, she was, to her great joy, delivered of a live male child, which, though small, was reared by sucking another woman at first, and afterwards the mother, who had formerly lost two children.

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### C A S E III.

*Communicated by Mr. Campbell, in a letter, dated from Poole, April 24, 1750.*

S I R,

THE following being a very uncommon case, I am willing to communicate the same, to have your sentiments on the subject:

A woman in this neighbourhood was delivered of her first child, and the delivery followed by severe after-pains; and, five days after, she miscarried of a fœtus, which could be no more than four or five months in growth. There was no sign of putrifaction about it, though it was still-born; there was no hair, nor other sign of its being longer conceived. How to reconcile this with the present doctrine of conception, will, I believe, be found difficult. I should be glad, if at the same time you would be pleased to acquaint me how to distinguish betwixt an obstruction and the total disappearance of the menses in women.

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*My answer was to this effect.*

S I R,

WHAT you have writ me seems to favour the notion of super-fœtation more than any thing I have met with in practice. But there are instances of extra-uterine fœtuses which have lain whole years in the abdomen without being putrified. However, we see, from time to time, things happen that we cannot account for, and these destroy all our fine theories.

The menses commonly disappear in women between the age of 45 and 50: sometimes they leave them sooner, if the woman chances to grow fat, if the catamenia appeared early in life, or if she had bore many children: but whether the disorder proceeds from obstructions, or the total disappearance of the menses, the intention of cure in both cases is, to repeat venæsection and gentle purgatives.

Schenckius, lib. iv. De Super-fœtatione, p. 617, has collected several observations of super-fœtations.

Others of late, to prove the possibility of such things, have advanced an attested case from America, of a black woman, who by conversing with her husband, of her own complexion, and immediately after with a white overseer, was delivered of twins, one a mulatto, and the other a black child: also another of a woman of Charles-Town, South-Carolina, mentioned by Dr. Parsons, in a lecture read before the Royal Society of London, who was brought to bed of twins, one a mulatto, and the other a white child. She confessed, that immediately after her husband had left her, a negro servant came to her, and forced her to comply with his desires, by threatening her life if she refused.

In the Memoirs of the Academy of Sciences at Paris, H. 1702, p. 30, &c. we read of the delivery of a boy, in whose placenta was found a sort of bladder, which contained a female fœtus, reckoned to be four or five months; and H. 1729, p. 12, of two children delivered at a day's distance, one aged forty days, the other at the full time.

Ruyfch, in tom. i. observ. xiv. gives an account of a surgeon's wife at Amsterdam, who was delivered of a strong live child, and in six hours after, of a small embryo, the funis of which was full of hydatides, and the placenta as large and thick as in one of three months. He exhibits a figure of this phenomenon.

Mauriceau, in the midst of his additional observations at the end of the book, mentions his having seen a young woman who had been delivered at the usual time, of twins, one of which was alive, and of the ordinary size; the other was dead, and seemed to be only of three or four months. He accounts for this circumstance, by supposing the death of the child at the term of four months, but that its waters remained uncorrupted, from the air not being admitted, &c.

## COLLECTION VII.

*Of women who exceed the common term of gestation.*

[ Vide Part i. Book i. Chap. iii. Sect. vii. ]

### C A S E I.

**I** WAS bespoke to lay a young woman of her first child. She was taller than the middle size, and had been healthy from her infancy. She was married about a week after the menstrual discharge, which not returning at the stated time, she was seized with the usual complaints of sickness and retching, which her mother supposed to be certain signs of pregnancy; and though she reckoned only to the beginning of June, she was not delivered till the end of August. Before marriage the menses had flowed regularly every four weeks; and though she, perhaps, did not conceive immediately after wedlock, it was reasonable to suppose she actually exceeded the usual term of gestation, by four or five weeks at least. Her labour was very tedious, though the pelvis was of a large size; but the child was very luffy, and the head squeezed into a longitudinal form. Two years after, I delivered her of a second child, which was also very large; yet the labour was short, and happened according to the common time of reckoning; nor was the head of this last squeezed into a longish form like that of the first, which was indeed the largest child I ever brought into the world.

CASE

## C A S E II.

I WAS called by a midwife to a woman in child-bed, and found the breech of the fœtus presenting at the brim of the pelvis, where it had stuck for some time without advancing, although the mother had been long in labour, and the membranes had been broken eighteen hours before I came. I with great difficulty pushed up the breech, and brought down the legs; and after much fatigue delivered her of a live child. According to this woman's reckoning, she had exceeded the usual time of gestation by eight weeks; for she affirmed, and her mother confirmed the assertion, that she had but one discharge of the menses after she was married, and in the middle of the month was seized with the common symptoms of pregnancy, from which they concluded she had conceived soon after the evacuation.

I have selected these two cases from a great number of less certainty, to show that women may probably go with child beyond the nine months, though this is a circumstance that rarely happens. Indeed, I have known many women exceed that period by their own reckoning; but I have generally supposed they committed some error in keeping the account.

*Vide La Motte*, liv. i. chap. xxvii. and xxviii. where we read of women who have been delivered a considerable time before and after the term of reckoning. I myself very often find my patients go two or three weeks beyond the nine months, reckoning from the last discharge of the menses.

## COLLECTION VIII.

*Of what is commonly called the false conception, molas, and hydatides.*

NUMB. I. CASE I.  
OF FALSE CONCEPTION.

**B** EING called to a gentlewoman, I was told by the women who were about her, that she had miscarried of a false conception in the third month; and that the same misfortune had happened to her several times before this accident. The midwife pretended that these false conceptions proceeded from a foulness of the uterus, and had prescribed, from time to time, decoctions of sabine, artemisia, and other herbs, to be taken by the mouth, and injected by the vagina.

This being the first case of the kind which I had seen, I carefully examined the substance, which was bigger than a goose-egg, and found it no other than a coagulum of blood, of which she had lost a large quantity, formed round the secundines by the pressure of the vagina, where it had lain for many days. I plainly discovered the cavity which had contained the embryo, and assured them it was a real conception, though the embryo had been forced through the membranes and lost.

Since that time I have been concerned in a great number of cases of the same kind: sometimes I have found the embryo partly dissolved, and sometimes perfect, commonly of the size and figure of a small horse-bean, when the miscarriage happened in the ninth or tenth week of pregnancy; but

when



when no embryo was found, it was always termed a false conception by the good women.

When the membranes broke before the secundines were discharged, I have known the embryo pass off unobserved with the coagula of blood, and be lost among the clots; and at other times, when the membranes were not broke, I have found it dissolved in the waters.

In one case where I was concerned, the chorion had broke, and the amnios was discharged whole, with the embryo swimming in about ten times its own bulk of water, as clear as crystal. Though it was not bigger than a small bean, I could distinguish the legs and arms pretty well formed; but as I had not leisure to immerse it in spirits immediately, it lay in a cup for the space of twelve hours, at the expiration of which I found the waters muddy; and when I opened the amnios, in order to evacuate the corrupted fluid, and supply its place with spirits for the preservation of the embryo, I perceived the legs, arms, and greatest part of the body, were quite dissolved.

### C A S E II.

**I** ATTENDED a patient who miscarried in the fifth month, the fœtus and membranes having been discharged together. About five days after the miscarriage, I was called to examine a substance, which had been passed with a great deal of pain, and which the midwife termed a real false conception. This was about the size of an hen-egg, surrounded with what appeared to be a strong thick membrane, which, when I opened, I perceived the whole was no other than a coagulum of blood which had been strongly pressed in the uterus or vagina, so that the serous part having been squeezed out, the surface, in consequence of the pressure, had assumed the form and appearance of a membrane. I have seen a great number of such substances, which have been always mistaken for false conceptions by midwives, nurses, and even gentlemen of the profession. Indeed I myself had at first a confused notion of these things, until I understood that coagula of blood would assume such appearance from pressure in any cavity. These I have seen discharged both before and after miscarriages and deliveries, at all times of pregnancy, though generally in the first five months, and more frequently in the third than in a more advanced state of uterine gestation.

### N U M B. II. C A S E I.

#### O F M O L A S.

**A** WIDOW-GENTLEWOMAN, about the age of fifty, was suddenly seized with violent pains like those of labour, and a discharge of blood from the uterus. Two years had elapsed since her menses disappeared; but, having received a fall down stairs, she had, from the time of that accident, been subject to pains in the lower part of the abdomen and back, with a slow draining of blood from the uterus. These complaints continued six months before she was taken with the violent pains, in consequence of which I was called to her assistance. I felt the os internum a little open, and something presenting like the edge of a placenta, or a round fleshy substance. She was for several days kept tolerably easy, by taking five or ten grains of pil. Matt. or draughts with liquid laudanum, from fifteen to thirty drops, repeated occasionally as the pains returned. Laxative and emollient clysters were frequently injected by way of fomentation

as well as to evacuate the intestines. The os internum was gradually dilated, the discharge and pains suddenly returned, a large oblong flesh-like substance was thrust down into the vagina, and by gently opening the os externum, at length extracted, when the pains and flooding abated. This substance being examined, appeared to be nothing else than the fibrous part of the blood, strongly squeezed together, nearly as large as the head of a child in the sixth or seventh month. A bloody serum continued to drain from the parts for several days, when the red colour vanished, and it began to yield a strong fœtid smell. She was seized with violent pungent pains in the hypogastric region, the lips of the os internum swelled, and became unequally indurated, the pains and discharge increased, with all the direful symptoms of a confirmed cancer in utero. Yet no other flesh-like substance was evacuated, though every now and then she was attacked with violent floodings; at length she became hectic, and died in about three months.—*Vide col. ix. No. ii. case iii.*

### C A S E II.

*Mr. Watkins, Surgeon, at Colehill, in Warwickshire, writes to this effect.*

**G**IVE me leave to trouble you with one case, as a confirmation of your doctrine, that the mola is for the most part an excrescence or coagulated blood, and not a false production from generation.

I was called to a married woman full sixty years of age, who flooded profusely, in consequence of a falling down of the womb, as I was informed by the midwives, for she was attended by two who had attempted the reduction. Finding an imperforated substance presenting, I concluded it was not the uterus: then placing her in a proper posture, I introduced my hand, and delivered her of a muscular or rather tendinous-like substance, as big as a large calf's heart, exactly resembling the auricles, and conical point, which had presented at different times, for seven years last past, with vast flooding and excruciating pains. The loss of blood was now excessive, but by the help of incrassating medicines and acids, she is happily recovered and hearty.

*Vide Boneti Sepulchret, lib. iii. sect. 37. Ruysch, tom. i. observ. 28 and 29. Forestus de Morbis Mulierum, lib. xxviii. Hildanus, Centur. 2. observat. 24.*

### N U M B. III. C A S E I.

#### HYDATIDES DISCHARGED FROM THE UTERUS.

**I**N the year 1752, one of my pupils attended a poor woman, who, in the fourth month of her pregnancy, was taken with a violent flooding, which was restrained by opiates; but in three days returned with greater violence, accompanied with strong pains and frequent straining like a tenesmus. At length she discharged a potful of coagulated blood and hydatides, adhering to a membranous substance, or to one another, like a bunch of grapes of different sizes, from the bigness of a nutmeg to the smallness of hemp-seed. The patient was reduced to such a degree, that we thought she could not possibly live; nevertheless, she gradually recovered, contrary to our expectation.

## C A S E II.

*Communicated by Mr. Crawford, of London.*

I WAS called to a woman about the age of twenty-seven, who thought herself seven months gone with child. When I entered the room, she stood leaning on the back of a chair, with an earthen pot betwixt her legs: she had voided near a pint and an half of blood into this receiver before I came, and at times evacuated the same quantity for near three months. Her flooding was then much abated; but she was very weak and low, though almost entirely free from pain. When I examined the matrix, I found the os tincæ open to scarce the breadth of half-a-crown, but nothing like the appearance of a child. Though her flooding was now but small, in consideration of her having enjoyed no rest for three nights before, she was, by my direction, put to bed, and took a composing draught, which made her sleep about two hours; but she waked with seemingly strong pains. I examined her again, and introducing my fore and middle fingers into the vagina, felt something which I mistook for clotted blood. It filled both my hands when I brought it away, and appeared to be a large bundle of hydatides, connected one with another by an infinite number of small slender filaments. These bladders contained a clear lymph, and were of different sizes, some as large as my thumb, and others as small as a pin's head; and her pains continuing, she evacuated as many as filled a two-quart basin; thus delivered, she was freed from her pains, her flooding ceased, and the womb contracted to the size of my fist. Nevertheless, she was strongly possessed with the notion that there was a child remaining, and earnestly begged that I would bring it into the world. I assured her that she was already delivered of what she had mistaken for a child: and having prescribed what was necessary, left her very well satisfied and composed. Next day I found her easy; she continued to do very well, and, at the writing of this case, was in the fifth or sixth month of pregnancy.

N. B. She had been delivered of two children before she was troubled with the hydatides.

Mr. La Motte, in his xvth Observation, gives an account of a woman that imagined herself gone with child above five months, who was delivered of a mole, or something of that nature, as big as two fists, composed of an infinite number of vesicles, tied to one another by membranes, and which held together like a swarm of frogs, after being excessively weakened with a continual loss of blood for eighteen days, which was slight at first, but became very violent before delivery, and stopped immediately after.

In Observat. xvii. he gives an account of a woman that imagined herself gone seven or eight months, who passed a great quantity of waters, which, he thinks, was a real dropy of the uterus.

In Observat. xviii. he gives a case where the abdomen increased to a great height, to the eighth or ninth month; and, although the woman had her menses, she imagined she was so long gone with child, having missed one period at the beginning of her reckoning; but instead of being delivered of a child, she, for several days together, passed an incredible quantity of wind, making the same noise as when it vents itself at the anus, but involuntarily. *Vide Ruysch, tom. i. observat. 18.*

In Phil. Trans. No. 30, p. 2387, there is a paper by Mr. J. Young, giving an account of balls of hair, with bones in the middle, some like teeth, others resembling the mandible, with a few sockets and teeth in them



them, contained in different parts, as the uterus and ovaria, &c. There are also accounts of the same kind, by Dr. Edward Tyson, No. 2, p. 11, and by Dr. Sampson, No. 2, p. 49.

## COLLECTION IX.

*Of polypus, scirrhusity, and cancer, in the uterus and vagina.*

[ Vide Part i. Book i. Chap. iii. Sect. ix. ]

### N U M B. I. C A S E. I.

#### O F T H E P O L Y P U S.

A WOMAN turned of thirty, who never had bore children, consulted me about a very extraordinary distemper. One of the sebaceous glands, on the right side of the os externum, and close to the carunculæ myrtiformes, had insensibly increased and swelled to such a degree, that I found it as large as a middling pear, hanging from the part by a long neck as thick as my little finger, and about half a yard long, so that the tumour reached down to her knees. I perceived the lower end, which was the largest, excoriated, and appearing like an herpes, though she felt no pain; and from this part a small quantity of blood was discharged during every menstrual evacuation. A ligature being applied to the neck of the tumour, close to its origin, it was amputated, and the wound cured without any difficulty.

### C A S E II.

A MIDWIFE being called to a woman in labour, about the age of twenty-six, felt not only the child's head pushing down through the os internum into the vagina, but, at the same time, another large, firm, round substance at the side of the head, protruding in the same manner. A male practitioner being consulted, could not discover the nature of this tumour, and left the patient, telling her it was surgeon's work. Nevertheless, the head was with great difficulty forced beyond the swelling, and the child delivered, though the midwife was unjustly accused by the neighbours of having pulled down the uterus. Some months after her delivery, the tumour inflamed, and matter being formed below its surface, was discharged to such a quantity as emaciated and enfeebled the patient. A gentleman being called to her assistance, desired my advice; but when we consulted together, no right judgment could be formed, because the tumour filled up the whole vagina, and the os internum could not be felt. We recommended a milk-diet, and some time after the consultation we were called again, when we found the swelling forced down without the external parts, and could plainly feel the os internum, to the side of which the tumour adhered by a very short neck, about an inch thick, and of a livid colour towards the lower part. The os internum was pulled down in such a manner that the lips were perceivable, together with the upper part of the tumour, which had not as yet changed colour. Round this, a firm ligature being made, the tumour was amputated, when we found the lower parts of its neck already livid. Before this separation the patient had

been tormented with violent pains from the pulling down of the uterus and the straining of the ligaments, and at the time of the operation was very much exhausted ; so that she died in two or three days after the excision.

The body being opened, the under side of the uterus was found mortified, and the right side adhering to the neighbouring parts, by which the ovarium and Fallopian tube of that side were covered and concealed. The tumour being cut open, appeared to be a solid, firm, glandular substance.

### C A S E III.

*Communicated in a letter from Mr. Holyoake.*

**T**HE child presented with the back, and was extracted footling ; and after delivery, the placenta came away with little or no assistance ; but the uterus still continuing remarkably large, Mr. Holyoake suspected that there was contained in it a great quantity of coagulated blood, or another child. He accordingly introduced his hand into the womb, and felt a large fleshy substance adhering to the left side of the fundus, with small excrecences hanging from it like teats. At first he was afraid of extracting it, lest it should be followed by a mortal hæmorrhage ; but, considering that a dangerous flooding might ensue from the uterus being thus kept distended, he resolved to separate this substance ; which did not come away without considerable force, and weighed near two pounds, being of the texture of a polypus.

As he desired my opinion of this affair, I observed in my answer, that glandular excrecences, or polypuses, are commonly attached by vessels, and could not have been separated with the fingers ; the placenta, when left and long retained in the uterus, is compressed into a schirrhous hardness ; that the nature of molas is not yet ascertained ; and, though sometimes unaaccountable appearances occur, this substance seems to have been a large coagulum, which had acquired such firmness by pressure, in a flooding which might have happened before he arrived.

I myself had extracted as large coagula after delivery, though of a looser texture ; but those formed in repeated floodings, before delivery, are more solid, and assume the appearance of a fleshy substance.

### C A S E IV.

**I** WAS called to a woman by Mr. Pinkstone, who informed me that she had been much weakened with large discharges from the uterus, at first sanguineous, and afterwards of a brownish colour and fetid smell : on examining the vagina, I felt the uterus largely stretched, with little or no neck, and a little above the pubes, the abdomen felt like one in the sixth month of pregnancy. The os uteri was thin, and so much open as to receive the end of my finger ; and I found a small substance, like a polypus, lying loose within it. Two days after, being again called, the above gentleman told me that the woman had something like pains, that the os uteri was more open, and he could feel the substance adhering to the uterus by a small neck. This was really the case ; but when he pressed on the abdomen to keep down the uterus, I felt a contraction higher, as if the neck of the polypus adhered to another round hard substance, much larger and higher in the uterus. In two or three days, I was again called, and informed he had hooked down the polypus with his finger through the os uteri into the vagina. I then found it more sensible, adhering to a larger substance ; yet at no time did

I perceive

I perceive any discharge on my finger. She was aged thirty-eight years, had been married about a year; and although regular in the menstrual discharge, her bigness gave some suspicion that she might be with child. She had been taken with frequent sicknesses and retchings; which, about six weeks before I was called, had increased, and she was every now and then attacked with violent pains; then followed the large discharges, which weakened her so much as frequently to throw her into dangerous faintings. Every thing necessary was ordered as to diet and medicine, to support and keep up her strength; but the discharge was so great, that she at last sunk under it and died. When the abdomen was opened, a large quantity of brownish fœtid fluid was discharged, and a tumour appeared at the lower part, larger than a child's head, which we took first for the uterus; and from which we, with great difficulty, separated the peritonæum, omentum, and intestines; all these adhering so firmly to one another that we could scarce distinguish and separate them without tearing the parts. Finding we could not be informed properly, as the uterus lay in the abdomen, all was carefully dissected; and, when taken out, we found this large tumour was not the womb. We then endeavoured to find the ovaria and Fallopian tubes; but all the neighbouring parts adhered all round so strongly that there was no such thing to be discovered. Having dilated the fore part of the vagina, we discovered the little polypus lying in it, about the bigness of a kidney-bean, with a slender neck about an inch long; and opening the os uteri, we perceived a little cavity in the neck that had been stretched by the polypus which it contained. Tracing farther, we found the cavity of the fundus uteri, to our great surprise, no larger than in an unimpregnated state, and the neck of the polypus adhering, as we thought, to a round hard tumour that was contained in the substance of the uterus, on the left side of the neck. This being dissected out, seemed to be one of the glands, increased to the size of a small pullet's egg, covered with the internal membrane of the uterus; and the polypus adhered only to the inside membrane, and not to the gland. It was also covered by the peritonæum on the left side, and when cut open, was of a whitish solid substance. The polypus, when cut, was softer, and in colour and consistence like a kidney. We then examined the large tumour, at first taken for the uterus, which was of a livid colour, and full of the same fœtid brownish fluid that was found in the abdomen. We observed a small opening at the back part, by which this had been gradually discharged into the abdomen, and another opening lower down through the rectum, which was livid. This circumstance showed that the fluid trickled from the tumour into the abdomen, and from thence through the rectum and fundament, and not from the uterus through the vagina, as had been imagined. This tumour appeared to proceed from the fundus uteri; and, in examining more narrowly the substance of the uterus, which was white, solid, and a little thicker than common, we found another gland, near as big as the first, and a little above, on the left side of the fundus, and contained also in the substance of the uterus; but when we cut open this gland, it was grown livid on the inside. We then concluded it was more than probable the large tumour was originally one of these glands that had increased gradually as the others; that it had turned cancerous on the inside, and had been gradually stretched more and more with the cancerous fluid that had burst through, and was discharged as was before observed. The inside of the tumour was full of little hard knots, of the bigness of hemp-seed, and the coats about one-eighth of an inch thick. The pain was much of the same kind as a burning heat and



tearing, attended with a hectic fever, syncopes, a low, quick, and sometimes an intermitting, pulse. These symptoms, before I examined the os uteri, made me imagine there was a cancer in the uterus; but, finding the os uteri soft, and not scirrhus, and in large hard bumps, as in other cases when cancerous, I was at a loss what judgment to form, though I imagined it was more probably a gland or polypus, increased to a large size in the uterus, and turned cancerous, and that the small polypus was an appendix from that; and as she had something every now and then like labour-pains, the large polypus, if it adhered to the uterus with a small neck, might be at last forced down into the uterus and taken off by a ligature.

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C A S E V.

*Communicated by Dr. Harvie.*

A WOMAN who had bore several children, and was of a delicate constitution, about the age of forty-five began to be irregular as to the catamenia. Sometimes she had frequent returns, and at other times at an interval of two or three months, and generally much in quantity; always attended with more or less pain. She continued in this way for two years, when she was seized with violent throbbing pains above the left groin, and had no rest unless she took an opiate. A large quantity of ferous fœtid matter began to be discharged from the vagina, which by degrees brought her very low. She had consulted several physicians, but found no relief; at length I was sent for to inform her physicians of the state of the uterus. Upon examining, I found all the back part of the vagina filled up with a large hard substance, the os uteri more forward than common, with large, hard, and ragged lips; from which the doctor and I agreed that the uterus was scirrhus and cancerous. She now also had great pain above the left groin, which we supposed to proceed from the ovaria and ligaments being also affected. She made water with great difficulty, and never went to stool unless by the force of medicines. She had now no intermission of pain but by opium, which at last was increased to thirty grains in twenty-four hours. For several months before death she continued in this deplorable situation. I was afterwards desired to open the body, and found a considerable quantity of thin ichorous matter, of a very offensive smell, floating among the intestines; the peritonæum, the external coat of the intestines, was eroded every where as far as the matter had insinuated, and the intestines were every where adhering. At first I was at a loss to know from whence this matter came, or indeed to distinguish one part from another; but upon careful inspection found that the right ovarium was scirrhus, one end of which had formed into a large abscess and broke. The uterus was also scirrhus, and about the bigness of a goose-egg, and pressed so close to the pubes that no part of the bladder could be seen: the inside of the uterus, when opened, was wholly ulcerated. I then looked for the left ovarium; but not finding it *in situ*, and observing the uterus thrown closer to the pubes than might be expected from its bigness, it came into my mind that it might have fallen down behind the uterus; which accordingly was the case, the upper end of it lay upon the last vertebra of the loins, the bulk of it filling up all the concave part of the sacrum. The length of this ovarium was five inches; in thickness four inches, entirely scirrhus. Although it was not attended to in the dissection, yet the great quantity of matter that was discharged from the vagina when the patient was alive, must have been from the imposthumated ovarium corroding and making its way through the parts

parts (*vide* case iv.) as that did into the rectum, which prevented an ascites in the abdomen.

Bonetus, in his *Sépulchretum*, lib. iii. sect. xxxii. observ. vi. viii. &c. gives several instances of sarcomatous and glandular tumours, which were mistaken for the uterus, until the contrary appeared upon dissection.

Saviard, observ. xxxvi. mentions a woman who imagined herself eleven months gone with child. The os internum being dilated to the bigness of a crown, they endeavoured to extract the extraneous body, but unsuccessfully. Since her imagining herself with child, she had every month a very considerable discharge of blood, which weakened her so much that she died. On opening her body, there was found, adhering to the fundus uteri, a fleshy mass of the bigness of an ox's heart, covered with a membrane, which seemed a continuation of that of the uterus, to which it adhered by a longish neck smaller than the tumour. There was a considerable cavity found in it that extended from its base to its point, into which the veins emptied themselves, and from whence the monthly hæmorrhage flowed. The substance of it was glandular and scirrhus, and its point gangrenous from the violence in the extraction. *Vide* M. Levret's Observations sur la Cure radicale du plusieurs Polypes de la Matrice, &c. Paris 1749.

In the Philosoph. Transact. No. 481, p. 285, is a letter from Peter Templeman, M. D. to William Beattie, M. D. Fellow of the Royal College of Physicians, London, and F. R. S. concerning a polypus at the heart, and a scirrhus tumour in the uterus.

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### NUMB. II. CASE I.

#### OF THE SCIRRHUS AND CANCER IN THE UTERUS AND VAGINA.

**I** ASSISTED in opening the body of a woman turned of seventy, who, for a long time before she died, had been very big in the abdomen, and subject to retchings and colic pains: the first disorder was supposed to proceed from water contained in cistuses, and the other complaints from a distemperature in the spleen or kidneys.

The adipose membrane and omentum were of an extraordinary thickness. The uterus was almost as big as a child's head, and seemed very solid to the touch; when laid open, we could not perceive the least appearance of a cavity, which, in all probability, was filled up by the increase and pressure of the glands. The gall-bladder contained about twenty stones of different sizes, while the ovaria were small and shrunk.

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### CASE II.

**A**N old female servant belonging to a lady in the country died in a very emaciated condition, her belly having been increased to an enormous size. The abdomen had begun to swell soon after the catamenia ceased to flow; and as it increased to a considerable bulk, she was afflicted with a difficulty in breathing, in making water, and going to stool. These complaints increased in proportion to the augmentation of the belly, particularly the difficulty in breathing; which would not allow her to lie in bed except when supported by pillows; though she was easier when up, especially when suspended by the arm-pits. A great number of deobstruent medicines were administered, as well as hydragogues; for the case was supposed to be dropical; but every thing proved ineffectual; and when she was opened, we were

not

not a little surpris'd to find the swelling proceeded entirely from the uterus ; which, when taken out, weigh'd about twelve pounds. It was altogether solid, without any perceivable cavity, of a white colour, and firm glandular consistence ; and had press'd upon the intestines in such a manner, that about four inches of the ilium were mortified. The ovaria were likewise much emaciated.

### C A S E III.

**W**HEN I opened the abdomen of the woman mentioned numb. ii. case i. collect. viii. I found the uterus nearly as large as that described in the first case of this number ; but the surface, instead of being smooth, was rendered unequal by large indurations as hard as a cartilage : the ovaria were affected in the same manner, and several scirrhoties appeared upon the omentum. The cavity of the uterus was irregular in consequence of those indurated swellings, the interstices of which were deeply ulcerated ; the os uteri was large, unequal, and studded with tumours as large as pigeon's eggs ; and the vagina was full of little ulcers with callous lips.

### C A S E IV.

**I** WAS lately called to a woman about the age of forty-five, who had never bore children, but, for ten years, had been irregular in the menstrual discharge, and always in great pains before its appearance ; she had likewise been afflicted with the fluor albus in great quantity. I felt a large hard tumour filling up all the back part of the vagina, to which it closely adhered by a large basis ; and it was with difficulty I could feel the os uteri cast forward toward the pubes, and studded with large indurated swellings : from which she had been for several months subject to excruciating pains, so as to be obliged to receive a clyster every evening, with an opiate after its operation. She had likewise from time to time large evacuations of blood, as well as the other discharge in great quantity, often of a brownish colour and very foetid smell.

I have known a great number of such cases, which commonly begin at the time when the menstrual discharge ceases, being occasioned by different accidents and irregularities ; and generally prescribe venæsection once a month, and some gentle laxative once or twice a week ; by which means the uterus, though scirrhus, is kept in a state of indolence, without inflammation, or degenerating into a confirmed cancer.

N. B. The above patient died soon after the case was sent to the press.

## COLLECTION X.

*Of complaints proceeding from uterine gestation.*

### NUMB. I. CASE I.

OF NAUSEA, VOMITINGS, AND LONGINGS.

[ Vide Part i. Book ii. Chap. i. ]

**I** WAS called to a woman, who having been attacked in the second month of her first pregnancy with violent retchings and vomitings, was persuaded by some of her acquaintance to take a vomit, which they supposed would remove the complaint. She accordingly took twenty-five grains



grains of ipecacuanha ; which operated upward and downward with such violence, as threw her into convulsions and floodings ; and when I came to her assistance, she was extremely low and faint. She immediately swallowed fifteen drops of liquid laudanum in a tea-cup full of mint-water ; and I prescribed the following mixture to be taken occasionally :

Rx Tinct. rosar. rub. ʒvss. Laud. liquid. gutt. xv. Conf. fraccast. ʒij. M. and between whiles a little burnt claret. The evacuations soon ceased, and she enjoyed tolerable rest that night ; but the discharge of blood returned next morning, and pains coming on, she miscarried the following evening.

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C A S E II.

**I**N about four months after this accident, the same woman became pregnant ; and being again attacked with sickness at her stomach, and retchings, in the beginning of the second month I was called to her relief. Finding she had exceeded the usual period of her catamenia about a week, I ordered eight ounces of blood to be taken from her arm : and she was immediately relieved. In four weeks after this evacuation, the retching began to return with more violence, the venæsection was repeated, and the complaint abated : she was twice afterwards bled, at the interval of four weeks, with the same success, and happily went on to her full time : nevertheless, though these evacuations greatly diminished the complaint, it in a small degree recurred every morning till the middle of the fifth month.

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C A S E III.

**A** WOMAN, subject to nervous complaints, was, in the second month of her second pregnancy, attacked with violent retchings ; for which she underwent gentle evacuations, and took draughts with the neutral salts to no purpose. The complaint, however, abated in consequence of her going into the country, and drinking asses-milk for the space of six weeks : but when she returned to town, the vomiting recurred with greater violence, and she miscarried in the fourth month.

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C A S E IV.

**I** WAS called to a woman who had been suddenly seized with a violent colic, and frequent straining like that of a tenesmus. She being costive, I ordered a clyster, which operated several times ; but the straining still continuing, I gave her twenty drops of liquid laudanum in a little white wine whey. In the mean time her sister, in putting her to bed, observed that she had undergone a large discharge of blood, and desired me to examine. I was not a little surprised to find the head of a fœtus forced down into the vagina ; however, I helped it along, and the placenta followed. This might be in the fifth month of her pregnancy. I found her next day in a fair way of recovery ; and was then informed that she had been privately married ; and the preceding night, in order to couceal this step, had eaten heartily of a dish which was known to have been her favourite, notwithstanding a nausea, which threw her into those severe colic-pains and strainings that occasioned the miscarriage.

## C A S E V.

A WOMAN who had bore children, been uncommonly healthy during pregnancy, and used to banter her female companions on account of their antipathies and longings, was herself, when four months gone with child, one evening unaccountably seized with a longing for an artichoke, when she heard them cried in the street; but as they at that time sold at an high price, she resolved to check her desire as a piece of foolish extravagance, and went to bed without having indulged her appetite. She could not sleep, however, but became restless and anxious, felt a craving and uneasy sensation at her stomach, and could think of nothing but the pleasing and relishing dish of which she had baulked her own inclination. Towards morning she was attacked by violent spasmodic contractions in her bowels, and I was just called in time to receive the little foetus: but there was no discharge from the uterus; so that I knew the placenta still adhered, and resolved to wait with patience until it should be disengaged and come away of itself. Being costive, she received a clyster; after the operation of which she swallowed the following draught, to be repeated every four hours, for three or four times:

R Confect. damocrat. ʒij. Aq. cinnamom. simp. ʒjss. Spirit. syr. croci  
ā ʒij. M.

By these means she obtained rest, and a plentiful sweat; and next night there was a small discharge from the uterus, succeeded by after-pains, which discharged the secundines. *Vide* La Motte, observ. 43, and 44.

## N U M B. II. C A S E I.

## OF OBSTRUCTED URINE AND COSTIVENESS.

BEING called to a woman, who, in her first child, had a total obstruction of urine about the end of the fourth month, I found her in great pain from a distention of the bladder; for the suppression had continued full thirty hours; and immediately gave her ease, by drawing off the urine with the catheter. For several days she had made water with some difficulty, and but a very little at a time; and when I examined, I felt the uterus lower than usual. After having evacuated the bladder, I ordered her to be bled, and a clyster to be administered, as she was costive. Next morning I found her in the same condition as before, she having passed no urine since the catheter was used. I again examined the state of the uterus, and felt it forced still lower down by the pressure of the over-charged bladder: indeed it was so low, that I could feel the length of the neck, and the stretching of the fundus, which seemed to fill up the whole pelvis. I likewise examined by the rectum; when finding it press strongly against the sacrum as well as the pubes, and feeling it uncommonly hot, I concluded that its whole body was inflamed. When I pressed my finger against the os uteri, so as to raise it up, some of the urine was discharged, but this being in small quantity, I was fain to have recourse to the catheter; by which she was again relieved of the pain above the pubes, although she continued to complain of great pain lower down in the pelvis. She had a quick pulse, accompanied with other feverish symptoms, for which bleeding was repeated to the quantity of ten ounces; and as the clyster had not operated according to expectation, I prescribed a solution of mann. ʒj. sal. Glaub. ʒij. in aq. fontan. and directed that the clyster should be repeated in case this haustus should not begin to operate in two hours. Next day I was called again to evacuate the urine, and found that the draught had operated several

several times; but the pains in the vagina still continued, together with the fever, though not so high as the preceding day. I then advised her to be cupped and bathed; by which means her complaints abated; yet I was obliged to draw off the urine once in twenty-four hours, for eleven days, before she could pass it in the natural way, and then she went on to her full time. She began to be troubled with this suppression about the same time in her next pregnancy; but by bleeding, and keeping her body open, it was prevented from being total. I have had two other patients troubled with the same complaint about the same period of gestation, which continued fourteen days, and was overcome by the same method, namely, by repeated bleedings and clysters, together with the assistance of the catheter. I have frequently known a difficulty in making water happen at the end of the fourth, and vanish about the middle of the fifth month.

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### C A S E II.

**I** WAS lately called to a woman in the fifth month, and felt the fundus uteri forced down backward to the lower part of the vagina, the os uteri being forward and above the inside of the left groin. The neck and under part of the bladder were so pressed, that the patient had not urined for several days; the vesica was stretched up to the scrobiculus cordis, and a fluctuation was felt as in an ascites. The male catheter was used, because the other was too short, and emptied a great quantity of urine; so that the distention of the abdomen considerably diminished.

Next day, after the same operation, the miscarried, consequently the obstruction was removed: but being greatly emaciated by want of nourishment, she was in two or three days carried off by a diarrhœa.

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### C A S E III.

**B**EING called to a woman who was seized with labour-pains, and a small degree of flooding, in the third month, occasioned by a violent tenesmus, I ordered six ounces of blood to be taken from her arm, and prescribed an anodyne draught, which relieved her for several hours; but the pains returning, she soon miscarried. The same accident had happened to her twice before, from the same cause; for she was naturally very costive. She no sooner suspected herself of being with child again, than my advice was demanded; and she being of a full habit, I prescribed venæsection to eight ounces, and a laxative clyster to be injected immediately. Then I directed her to take about three drachms of the elect. lenitiv. every other night, to live chiefly on broths and boiled meats, with boiled roots and greens, and, as it was then summer, to eat ripe fruits. By this regimen her body was kept open, and she went on to the full time.—*Vide La Motte, observ. li. & seq.*

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### N U M B. III. C A S E I.

OF SWELLINGS OF THE HÆMORRHOIDS, LEGS, THIGHS, AND PUDENDA.

**I** VISITED a woman in the fourth month of her pregnancy, who was very much afflicted with costiveness and hæmorrhoidal complaints, to which she was naturally subject. At this time, however, they had increased to a great degree; and the pain was so severe, that she had enjoyed little or no rest for several nights. I prescribed venæsection, to the



quantity of ten ounces; and as she was averse to a clyster, ordered a bolus, consisting of R. Flor. sulph. ℥j. Pulv. echel. cancror. simp. ℥ss. Elect. lenitiv. ʒj. Syr. ros. solut. q. s. to be taken at bed-time, in some water-gruel, made with fresh butter. If this should not operate plentifully next morning, I directed it to be reinforced with sal. Glaub. ʒij. mannæ ʒj. dissolved in water. She accordingly took both prescriptions, in consequence of which she had three motions. The sphincter ani was so swelled, inflamed, and painful, that I thought it necessary to foment the parts with the steams of an emollient decoction, in which some sal ammoniac was dissolved, with a mixture of spirit of wine and vinegar. Notwithstanding these applications, the pain, swelling, and fever increased; and being afraid to use scarifications or leeches to a woman in her condition, without farther advice, I desired a physician might be called. He ordered a repetition of venæsection and opening medicines, by which the fever was allayed; but as the hæmorrhoidal swellings did not subside, we ventured to apply leeches to the parts; about five ounces of blood were discharged, and the swelling immediately subsiding, she proceeded happily to the full time.

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### C A S E II.

**I** ATTENDED a woman whose legs had begun to swell in the seventh month of pregnancy; and this swelling, which was of the leucophlegmatic or anasarcaous kind, continued, without giving her much disturbance, till the middle of the ninth month; when being obliged to walk a considerable way upon some particular business, she, on her return to her own home, found her left leg and thigh excessively swelled and painful. Indeed, when I was called, I began to fear a mortification would ensue, for the skin appeared of a livid hue. The woman being otherwise of a strong and healthy constitution, I immediately ordered twelve ounces of blood to be taken from her arm; and, as she was costive, prescribed a purgative clyster, which operated three times. Her leg and thigh were fomented with a decoction of the same nature as that described in the preceding case; and, as the pain continued, an emollient cataplasm was applied over all the parts affected. She enjoyed little rest that night; and finding her fever, pain, and restlessness remaining next morning, I ordered her to be bled again to the quantity of ten ounces. I directed her to take draughts with the neutral salts, to drink plentifully of an emulsion with nitre, and continue the use of the fomentation and pultice. Next day the pain and tension were a little abated; but her pulse being still quick, she was again bled to the quantity of eight ounces, and the internal medicines, with the external applications, continued. By these means the inflammation was carried off in a few days; and in a little time, she fell into labour, and was safely delivered.

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### C A S E III.

**A** WOMAN of a lax habit of body, during her first pregnancy, ran into the extreme of being too abstemious, and drank nothing but water. In the fourth month her legs began to swell; and when I was called in the seventh, I found not only her legs and thighs œdematous, but also the labia

bia pudendi so much swelled that she could not walk. This swelling, however, subsided, in consequence of a few punctures with the point of a lancet, I then prescribed repeated doses of the confectio cardiaca, and directed her to drink strong beer or wine, instead of small beer or water. By these means she recovered a little from the languishing condition in which she was, though the swellings of the legs still continued; and when that of the labia returned, so as to prevent her taking a little exercise, it was reduced as before by the punctures.

In this manner she went on in her pregnancy to the end of the eighth month, when she was taken in labour; and though her weakness rendered the case tedious, she was safely delivered of a very small child that lived some weeks. She recovered tolerably well of her lying-in for the first twenty days, and the œdematous swelling subsided; but her constitution having been so much weakened and impaired, the whole surface of her body began to be puffed up with an anasarca. This case being without the sphere of practice to which I had confined myself, I desired that other advice might be used; notwithstanding which the disease still increased, and carried her off in about six weeks after her delivery. *Vide La Motte, observ. xlv, xlvii.*

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#### N U M B. IV. C A S E I.

*Of pains in the back, belly, sides, together with vomitings and difficulty in breathing, toward the end of pregnancy.*

I WAS called to a woman of a weak and lax habit of body, in the third month of her pregnancy, who was seized with violent pains in her back, and a discharge of blood from the uterus; but before I arrived she had miscarried. I then understood she had formerly suffered a great deal from violent floodings in her second pregnancy, when at her full time, by which her health was weakened and impaired: since that misfortune she had four times miscarried in the third month, notwithstanding her having been bled by way of precaution; which indeed she imagined had hastened the miscarriage, by throwing her into fainting fits, accompanied with pains in the back, which were always the fore-runners of flooding. I advised her to go to Bath, and drink the waters, in order to strengthen her constitution before her next pregnancy; and this expedient had the desired effect; for soon after her return she became pregnant, and went on to the full time.

I have had several instances of women of a lax habit who could not bear evacuations, but miscarried in consequence of them.

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#### C A S E II.

A WOMAN of a healthy constitution was attacked, in the fourth month of her second pregnancy, with a violent pain in her back, for which I ordered ten ounces of blood to be taken from her arm; and as she was constipated, a laxative clyster to be injected. By these means the violence of the complaint was abated; but next day her pulse continuing quick and full, the venæsection was repeated to the quantity of eight ounces, and a strengthening plaster applied to the back. These precautions being taken, she proceeded tolerably well till the eighth month, when she was seized with stretching pains in the abdomen and side. I again prescribed

phlebotomy to the amount of eight ounces, and directed the parts affected to be frequently anointed with pomatum. By which means her complaints were relieved, and she went on to the full time.

She had miscarried in the third month of her first pregnancy, neglecting the precaution of being bled when she was seized with pains in her back, and other plethoric complaints. I have been consulted in many such cases, and always find, that women of a full habit are relieved by venæsection at any time of pregnancy.

### C A S E III.

A WOMAN was, toward the end of the eighth month of pregnancy, attacked with vomitings and a difficulty in breathing; which increased to such a degree, that she could not lie in bed, but was supported by pillows, in a posture between lying and sitting; nor could she retain either solids or fluids on her stomach. I was called about the middle of the ninth month, when I found the uterus stretching higher up than is usual in the abdomen. I was informed that she had nearly the same complaints, though not to such a degree, in two former pregnancies; that she seldom went abroad, took little or no exercise, but frequently lay on the bed, and that her dress had been always loose. In consequence of these hints and observations, I supposed that her complaints proceeded from the pressure of the uterus, and ordered six ounces of blood to be taken from her arm. I likewise prescribed draughts with the neutral salts; but these being rejected by the stomach, I directed about half a pint of strong beef-broth to be injected by way of clyster four or five times a day, to supply the want of nourishment by the mouth; and this succedaneum had the desired effect. Indeed I dissolved four grains of opium in the two first that were administered, in order to prevent their being discharged; but when the intestines were emptied, they remained without the opium, and were taken up by the absorbent vessels.

By these clysters she was effectually nourished, and the dyspnœa relieved by frequently taking the air in a coach, till she arrived at the full time, when she was delivered of a small weakly child, and a great quantity of water.

In her next pregnancy she laced tighter at first, slackening by degrees as she increased in bulk, and took a good deal of exercise; by which precautions her former complaints were prevented from returning.

### C A S E IV.

I ATTENDED a patient in her first labour, of a leucophlegmatic habit, lived in an indolent manner, and had the same complaints that are described in the preceding case, though not to such a violent degree. I was not called until she was in labour, which proved very tedious from her weakness; and I advised her to take more exercise, if ever she should be pregnant again. About two years after this period, I was summoned again; but she was delivered some hours before I reached the place of her abode. Far from having followed my advice, I understood she had acted in diametrical opposition to it; dressed in a loose slovenly manner, without even walking in her room, but rather chose, toward the end of her pregnancy,



pregnancy, to be always in bed, supported with pillows : the dyspnoea and retchings had begun sooner than in her first pregnancy, and she seemed to be in a very weak and dangerous condition ; for after delivery, her complaints did not abate. I advised those who were present, to send immediately for the physician of the family, and left her to his care ; but the *vix* *vita* was so much exhausted that she died in two days. As for the child, it had been dead for several days before delivery.—*Vide* La Motte, observ. 1.

## COLLECTION XI.

*Of diseases that occur at other times, as well as in uterine gestation.*

### N U M B. I. C A S E I.

OF STONES OR GRAVEL IN THE KIDNEYS OR BLADDER,

[ *Vide* Book ii. Chap. ii.]

I WAS called to a woman in the seventh month of her second pregnancy, who had been several years subject to violent gravel-pains in the kidneys, from which divers small stones had passed into the bladder, and were discharged with the urine. When I arrived, she was in great torture from a stone, which she imagined had stopped in the right ureter ; she was seized with violent vomitings and strainings, and her urine being high-coloured, I was afraid of a miscarriage. In this apprehension, I ordered ten ounces of blood to be taken from her arm, a clyster to be administered, and after its operation, prescribed ten grains of pil. Matth. by which means the violence of the pain was allayed, and in a little time the stone passed into the bladder. She was afterwards, from time to time, subject to pains from the passage of gravel, but not to such a violent degree ; though it was much more severe, and returned more frequently during pregnancy, than at other times.

### C A S E II.

*Communicated by Mr. Archdeacon, surgeon, at St. Neot's.*

ONE Gibbs, the wife of a coal-porter in this place, had long complained of violent pains in the bladder, with other symptoms of a stone ; but met with little compassion, because suspected of idleness, rather than of having any real disorder. She afterwards proved with child, and endured great torment all the time of gestation, till she fell in labour, when the midwife being called, was surprised to find a hard body presenting before the head of the child. She did not know how to act upon this occasion ; but the patient's circumstances not permitting her to employ a male practitioner, patience was the only remedy she had to support her through a long and painful labour. At last the midwife felt something come away, and, upon examination, found it was a stone, of the shape and size of a goose's gizzard, weighing five or six ounces, which she afterwards gave to Dr. Waller, of Cambridge. The child followed immediately after it was discharged, and proved to be a boy, who is now a blacksmith in London, about twenty-eight or thirty years of age. The woman recovered very well,

well, but was troubled with an involuntary emission of urine: she afterwards bore a daughter, and lived several years, until she was shot by accident at a gentleman's house in this town.

In Phil. Trans. No. 202, p. 817, there is a paper by Dr. Thomas Molineux, giving three cases of young girls of six, ten, and eleven years of age, from whom stones were extracted by dilating the urethra without cutting, although in the last the stone was of a large size. And another paper, in p. 818, of a woman who voided a stone that weighed above two ounces and a quarter. A stone about the same magnitude, was voided by another woman of sixty-three years of age, as attested by Dr. Richard Beard, No. 178, part v.

There is also a paper from Dr. Beale, No. xviii. p. 320, describing a stone taken out of the womb of a woman by incision, that weighed near four ounces.

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### C A S E III.

**B**ONETUS, in his Sepulchretum, book iii. sect. 38, obs. 1, relates a case of a woman who was for many years afflicted with a most violent pain in the left kidney, and though fourteen times with child, was always delivered before her full time, in the eighth or beginning of the ninth month. When she died, he opened her, and found the left kidney quite wasted; the right kidney was very much swelled, and contained a very large stone.

The thirteenth case was that of a woman who was for many years subject to convulsive disorders of the hysteric kind, which were more violent when she was with child; and she commonly miscarried at the end of the third month, and at last died of an apoplexy. When she was opened, contrary to his expectation, the womb appeared to be perfectly sound, and he could find nothing about those parts that could occasion the disorder; but, in opening the head, he found a large quantity of water lodged in the cavities of the brain, which he alledges was the occasion of these spasmodic pains and disorders, and of the abortions that followed.

He has several other cases of abortions, occasioned by several other causes.—*Vide collect. xii. of this book.*

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### NUMB. II. CASE I. OF HERNIAS.

**I** WAS bespoke to attend a patient in labour, who, from her infancy, had been attended with a small hernia in her left groin; which, however, disappeared in the fifth month of her pregnancy. As it still continued up when labour came on, I directed an assistant to press her fingers on the part during every pain, to prevent it from being overstrained; and she was safely delivered. I expected the hernia would return as soon as she should be recovered and walk about, because this was the case of another woman nearly in the same situation, though the hernia was larger, and on the left side. I was, however, agreeably disappointed; for it has not yet re-appeared, though I have delivered her twice since that period.

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### C A S E II.

**I** DELIVERED a woman who had been afflicted with a rupture in the left groin, during the whole time of uterine gestation. Though she could reduce the hernia, it was forced down by every pain, and gave her great uneasiness,

uneasiness. The labour being pretty far advanced when I arrived, I took the opportunity of reducing the hernia upon the cessation of the pain, pressing my fingers upon the part, and directing her to lie on her left side, with her thigh close up to the abdomen, a position which favoured its keeping up, and prevented the anguish which retarded the labour. She was accordingly safely delivered; and when she recovered of her lying-in, I recommended a truss, by which the disorder was palliated.

### C A S E III.

I ATTENDED a patient, who, after a former labour, was afflicted with an exomphalos, which disappeared in the eighth month of uterine gestation, but returned after delivery.

### C A S E IV.

I WAS called to a woman who had felt a swelling gradually increase at the left side of the anus; and this tumour disappeared when she was in bed, but always returned in the day while she was on foot. This hernia continued down all the time of her first labour; upon which an inflammation and strangulation of the intestine ensued, so that it could not be reduced as usual. But as she had a large discharge of blood after delivery, and the parts were fomented with discutient fomentations, re-inforced with warm and emollient cataplasms, the stricture was overcome, and the hernia reduced. In her next labour, the intestine was forced down by the pains, which had also pushed down the membranes with the waters, and considerably opened the os internum. The hernia, however, was reduced by opening the os externum, introducing my hand into the vagina, and pushing the intestine above the os sacrum. By this operation the membranes were broke, the waters discharged, and the head being forced down into the pelvis, kept up the intestine: then she was safely delivered, without undergoing the same risk she had run before.

### C A S E V.

I HAD occasion to examine a hernia of the same kind in a woman, who, about two years before I saw her, and a month after she was delivered of her first child, had felt a swelling on the left side of the perinæum and anus, which she imputed to the violence used by the midwife in delivering her. The swelling increased considerably, hanging down in the day, though while she was in bed she could gradually thrust it up into the pelvis between the vagina and rectum, by introducing two fingers into the vagina, and pushing it up until she found it returned into the abdomen; but when she arose it always relapsed. About three quarters of a year after this tumour first appeared, she conceived, and was seized with a violent cough, which forced down the intestine in such a manner as to increase the swelling to the size of a man's fist. As she augmented in bulk, she found greater difficulty in reducing the hernia, though the reduction became more necessary, from the pain occasioned by the pressure of the uterus, insomuch that she was frequently obliged to lie down on purpose to effect it. About five weeks before she fell in labour, the tumour increased to such a degree that she could not reduce it at all; and thus she continued for several days in great pain. As she had been an out-patient of St. George's hospital,



Dr. Ross sent her husband with a message to me, desiring I would send one of my pupils to her assistance. It was late when I received this intimation, and the place of her abode being at a distance, I desired Mr. Tomkins to visit her; but she would not allow him to examine the tumour. Next morning I accompanied him to the place, and found her in great agony: the part was livid, and all round the edge of the swelling of a fiery red colour. She lay on her side, and when turned upon her back, for the convenience of examining the tumour, it broke in the middle, where the skin was thin, and where there was a small fluctuation underneath. From the opening, which was small, issued about a spoonful of pus, mixed with blood; and immediately after this discharge, a thin fluid of a greyish colour, to the quantity of half a pint. This rupture no sooner happened, than the patient exclaimed that the intestine was gone up, and that she was perfectly free from the pain, which the moment before had been so violent. We were very much alarmed at what had happened, because this fluid, which still continued to flow in a small quantity, appeared to be the contents of the ileon, part of which, we concluded, must be mortified. She being costive, the colon was emptied by a clyster, a pledget applied to the aperture, and she was ordered to take no other sustenance but soup made of lean mutton or beef. She recovered, contrary to our expectation, went on to the full time, was delivered by Mr. Tomkins, and some months after her delivery called upon me, when I found the hernia had kept up, and the part appeared firm, though a little ichor continued to ooze from the small orifice; so that I imagined the inflamed intestine had adhered to the neighbouring viscera, after the mortified sloughs had been cast off. She was frequently troubled with violent pains, and great weakness in that side of the belly, as if the guts was become narrow and contracted, so as to hinder the easy passage of the ingesta. In about five months after this cure, the rupture re-appeared, in consequence of her over-straining at a wash-tub; and she being again pregnant, it was several times reduced by one of my pupils, by whom she was likewise safely delivered. She afterwards sickened of the small pox, and died.

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### C A S E VI.

*Communicated in a letter from Mr. Stubbs, of Bedfordshire.*

**H**E was called to a woman near forty years of age, in labour with her first child, and understood a midwife had been in waiting ten hours, and that the membranes were broke. The vagina and pelvis were filled up by a tumour, which at first touch he mistook for the head or nates of the child, for he had scarce room to introduce one or two fingers betwixt it and the pubes; but opening the os externum, and pushing up this tumour, he felt the os uteri largely dilated, and the child's head resting against the pubis.

He withdrew his hand, which was very much cramped and pressed; and having rested a little, and considered the nature of the tumour, which probably proceeded from the intestines pushed down at the back part of the vagina, he again insinuated his hand, and pressing strongly upon the tumour, it was reduced, and the head immediately descended into the pelvis; then it was delivered by the forceps, because the woman was weak, and both mother and child did well.

## NUMB. III. CASE. I.

## OF AN ASCITES DURING PREGNANCY.

I WAS called to a woman immediately after her delivery, who, from the bigness that remained, imagined there was another child in the uterus. Upon examining in the vagina, I could find nothing to justify this notion; but in the abdomen, which was very large, I plainly felt a fluctuation of water. This increased considerably after she recovered of her lying-in; when I advised her to consult her physician and surgeon, who, in order to relieve her of the anguish proceeding from the distention of the parts, tapped her several times before she died.

## C A S E II.

IT will be unnecessary to describe particular cases of the anasarca: I shall therefore, once for all, observe, that I have been called to several patients of a weak and lax habit, and found the cellular membranes swelled over the whole surface of the body. By the method prescribed in collect. x. No. iii. case iii. all of them were relieved and strengthened before delivery, except one woman, who, after delivery, was, from excessive weakness, carried off by an universal anasarca.—*Vide* Mauriceau; observ. 81, and Medical Essays of Edinburgh, part v. p. 642.

An account of an hydrops ovarii, by Dr. J. Douglas, No. 308, p. 2317, of the Philos. Trans.—A woman; not long after she had lain-in of her first child, received a violent blow upon the left side of her belly; the pain abated in two or three days; but returned in two months, when she observed that side gradually turn bigger than the other, and the pains increased; but in three months after she was first afflicted with them they went off, when she turned pregnant, and had no other symptom than what is common in that state, only she was much bigger than ordinary; after delivery, the swelling abated but little. In about a year after, she again conceived, went on to her full time, was delivered of a live child, but was so weak that she died on the third day. On the doctor's opening the abdomen, there issued out a vast quantity of slimy viscid water, in colour and consistence very much resembling a brown, thick, and ropy syrup, to above sixteen or seventeen gallons, which he imagined was contained in a duplicature of the peritonæum, as the intestines did not appear; but after examining more narrowly, he found that the thick membrane, including the waters, could be separated from the viscera and peritonæum. This bag reached from the pubes to the midriff; and from the left region of the loins to the right; and filled up the whole cavity of the abdomen, distending her belly so far, that a plate could easily lie on it when she was alive. After he had freed it from all the neighbouring parts, he found it adhered inseparably to the left Fallopian tube, and that it was nothing but the membrane of the ovarium thickened and distended by the collection of the above-mentioned humour. All the other viscera in the abdomen were found; and in their natural state.

There are several other papers of such cases in Phil. Trans. viz. No. 140, p. 1000. In a woman opened by Dr. Henry Sampson, the left ovarium was increased to such a bigness, that it and the fluid contained, weighed with the uterus, that was but light, 137 pounds. *Vide* No. 348, p. 452; by Dr. Hollings. And another, in No. 381, p. 8, of a dropsy in the left ovarium, of a woman of fifty-eight years of age, cured by a large incision.

made in the side of the abdomen, by Dr. Robert Houston, who relates the following particulars :

A woman near Glasgow, in her last lying-in, at forty-five years of age, suffered much from her midwife's separating and pulling away the placenta with too great violence, and was so sensibly affected with a pain which then seized her left side, between the navel and the groin, that ever after she had scarce been free from it, but had it more or less for thirteen years together.

That part of the abdomen increased, and gradually stretched to a great bulk, and at last drew to a point, when the Doctor made by degrees a large opening, from which was discharged a gelatinous substance, and then about nine quarts of such matter as is observed in steatomatous and atheromatous tumours, with several hydatides of various sizes, containing a yellowish serum, and several pieces of membranes, which seemed to be parts of the distended ovarium. After this, he sewed up the wound with three stitches, and by a careful management the woman recovered and lived several years. The doctor says, it plainly appeared, that the pain arising from the delivery of the placenta, and its continuing, was the occasion of an inflammation of that part of the uterus, and neighbouring parts ; and several writers corroborate this opinion, as Cyprianus, Forreltus, Ruysch, &c. Others have given remarkable cases of dropsies of the ovarium ; particularly one is described by Drelincourt, which seemed to be nothing but a number of little globules clustered together ; some containing water, exceedingly clear and limpid ; others, a yellow thin serum ; and others again, a glutinous matter : some were as big as pullets eggs, others bigger than a man's fist. The body of the ovarium, with its contents, weighed sixty pounds. These few, out of many instances from authors of undoubted reputation, he alledges, suffice to prove, that the ovaria, as well as the tubæ Fallopianæ, ligaments, and uterus itself, are not free from dropsies, &c. and they are owing to obstructions, often occasioned by rude and violent dealing with women in hard labours. In No. 423, p. 729, is a similar case from Mr. John Belcher ; and in No. 466, p. 223, another from Dr. Short.

#### N U M B. IV. C A S E I.

##### OF THE LUES VENEREA.

ONE of the poor women attended by my pupils, being near the full time, had a bubo in the groin, and her throat began to be affected with a venereal inflammation. Pultices were applied, in order to bring the tumour to suppuration ; and small doses of calomel were given internally, to restrain the infection, until she should be delivered. These methods seemed to succeed : she was safely delivered of a male child, which at first had no appearance of infection ; but, in about eight days, the scrotum and penis began to swell, inflame, and break out in little ulcers ; the whole body was soon covered with venereal blotches ; and it was attacked by a cough, which destroyed it in three weeks after it was born. As for the mother, the bubo was brought to suppuration, and the matter discharged ; and I designed to have sent her to an hospital for the cure of the lues, as soon as she should be in a condition to be removed ; but the ulcers in her throat grew worse and worse ; in about a fortnight after delivery her lungs were affected, a consumption ensued, and death was the consequence.



It is observed, in general, by the gentlemen who have frequent opportunities of salivating pregnant women in the hospital, that it is performed faster in the first six or seven months of pregnancy, than in the last two or three months, because they are then in danger of being delivered at the height of the salivation. But that they are less subject to miscarry in the fifth or sixth months, than in the first four months; that women ought not to undergo a salivation, unless the disease is like to prove destructive by phagedænic ulcers in the throat, &c. for if the disease can be palliated till the patient is recovered of her lying-in, if she suckles the child, and is then salivated, both she and the child will be cured with greater safety. That woman of a full habit should be bled, live abstemiously, and take opening medicines, before they are anointed with the mercurial ointment: also, if the menses are expected, we ought to wait till the evacuation is over, either in those that are pregnant, or in those that have them during pregnancy.

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*The following observations are from Mauriceau, with regard to the treatment of pregnant women affected with the venereal disease.*

**I**N observ. xxiii. p. 20, he gives an account of his being called to see a young woman, aged twenty-two, in her seventh month of pregnancy, who was then under a salivation for the lues venerea, and who spit near three quarts a-day; and yet was happily delivered at the full time, of a healthy child.

In observ. lxxi. p. 60, he mentions his having seen such a case as the former, only the patient was gone with child but two months and a half, and a moderate salivation was carried on for a month; the use of the warm bath was forbid; and the woman was at last safely delivered of a healthy child.

In observ. c. p. 83, a like case with the former is mentioned, with a remark, that in all cases where a pregnant woman is infected with a lues venerea, it is safest and properest to salivate them in the earlier months of pregnancy, when the evacuation will less affect the fœtus.

N. B. Two other cases are mentioned, but in one of them the patient had only a gonorrhœa, which, though not cured, did not affect the child; and in the other case the patient was only suspected of having a lues venerea.

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## COLLECTION XII.

### *Of miscarriages, or delivery before the full time.*

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#### NUMB. I. CASE I.

OF WHAT MAY OCCASION THE DEATH OF THE FŒTUS IN UTERO.

[ Vide Part i. Book i. Chap. iii. ]

**I** WAS sent for to a woman near the full time of her first pregnancy, who imagined she was in labour; but I found the os uteri close shut: and upon enquiring more minutely into the nature of her complaints, I thought they proceeded rather from the colic than from any tendency to labour; and she told me she had not felt the child stir for eight or ten days.

days. I ordered her to be bled, and the intestines emptied by a clyster; and these evacuations, together with an opiate, carried off the pains. In five or six days I was called again, and found the os uteri largely open, the pains strong and frequent; and though the case was tedious, she was safely delivered.

The whole body of the child, together with the funis, was livid; and this last, which was ten hand-breadths long, had a knot in the middle tight drawn, that part which had passed through the noose being small, and the rest very much swelled. The child seemed to have been dead about fourteen days; and the death, doubtless, proceeded from the knot's being drawn so tight as to obstruct the circulation.

I was concerned in another case, where there was a knot upon a long funis, yet not so close drawn but that the child was alive.

### C A S E II.

**I** ONCE delivered a woman of a dead child, round whose neck the funis had formed a kind of noose or knot; yet its death seemed rather to proceed from a hurt in the delivery; for the arm presented, and the child being brought footling, I found more difficulty than usual in delivering the head.

### C A S E III.

**I** WAS called to a woman in labour, and felt the os uteri backward toward the sacrum, and a little open, though I could feel no waters. The head pressed down the uterus before it to the lower part of the pubes; and I felt something unequal, like a long flat substance, between the uterus and globular part of the head. This, upon delivery, appeared to be about two inches of the funis pressed flat and mortified; and the child seemed to have been dead some days.

### C A S E IV.

**A** NOTHER child, which presented with the arm, I delivered footling, and found the funis wound three times round the neck, which, at the abdomen, was drawn very small, and flattened. This, no doubt, was fatal to the child, who had been dead many days.

### C A S E V.

**I** DELIVERED a woman, who, about fourteen days before, had been excessively frightened. In the instant of her terror, she felt the child bound surprisingly in her womb, a tremulous motion ensued, and after that minute she never felt it stir. She was taken with a vomiting and purging in the eighth month, which brought on the labour-pains, and delivered her of her child, which was entirely mortified. The cuticula was easily stript off, the abdomen swelled, and the scalp and bones were loose and pappy.

I have attended in many cases where much the same symptoms occurred in the three or four last months of pregnancy: and the child was generally dead, though sometimes it chanced to be alive. Women often miscarry between the fourteenth or fifteenth day, after accidents, fevers, excessive fatigue,

tigue, &c. and labour is generally brought on by super-purgation, sickness, and retching; and sometimes by the breaking of the membranes. I have likewise known many women miscarry, though nothing extraordinary had happened, and no cause could be assigned for the death of the child.

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C A S E VI.

**A** WOMAN five months gone with child, was seized with violent pains at her navel and stomach, together with a continual vomiting. She had conceived in March, and in August was taken with a pain in her back, from a strain in lifting a heavy pot. About a month after this accident, when her other complaints began, she perceived a fluid, of a brownish colour and mortified smell, continually draining from the vagina, and at different times, several bones of the fingers and toes of a child came away. Anodyne draughts, epithems, and opening clysters were administered, to ease the pain and restrain the vomiting; but all to no purpose. She became gradually emaciated, being worn out with pain, want of rest and nourishment; for her stomach would retain neither solids nor fluids. To remedy this defect, recourse was had to broth clysters, which were injected three or four times a day, and contributed effectually to the support of her strength and constitution. When the small bones began to be evacuated, and her symptoms were at the worst, a male catheter had been introduced within the os uteri, but could not pass above an inch beyond that part; and nothing but a soft substance could be felt. An attempt was also unsuccessfully made to dilate with long narrow-mouthed forceps; and injections were thrown up with a long slender pipe made for the purpose, which, however, reached but a very little way within the neck of the womb. At length, the anodyne medicines took effect, and the nourishing clysters succeeded to our wish. The soft parts of the child continued to dissolve and come away in form of a cadaverous ichor, till the month of December, when this evacuation ceased. However, she had several slight relapses till the May following, when she voided by the anus several bones of the skull, and other large bones of the body, the cartilages and spongy ends of which were dissolved, though they appeared to have belonged to a fœtus five months old. During this whole time, the lips of the os tinæ were smooth, and the neck of the uterus was long, nor had she the least flooding, until three months after, that the menstrual discharge returned. This was her first pregnancy, since which she has not conceived; and what is very remarkable in the case, she never had pains about the uterus, but only at the navel and scrobiculus cordis; and these were doubtless owing to the bones working their way through the womb and rectum.

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C A S E VII.

**A** BOUT the same time, another woman, who had formerly bore a child, and was in the fifth month of her second pregnancy, was taken with a flooding, which continued fifteen days, at the end of which a mortified ichor flowed in large quantity for the space of three weeks, though no bones were evacuated. Some time after this disorder, she recovered her strength, had a regular discharge of the menses, conceived again, went on to the full time, and was safely delivered. As in the former case, part of the bones was dissolved, it is probable that in this there was a total dissolution.

There



There are two cases much alike in the *Philos. Transact.* The first in No. 229, p. 580, by Mr. James Brodie, of a negro-woman, about the seventh month of her being with child, whose navel imposthumated and broke of itself; and after it had voided some quantity of ichorous matter, whereby she had some ease, the discharge ceased. In about a month after, it imposthumated again to a much greater degree than before; a surgeon opened it with a large lancet, and after discharging a great quantity of thin ichor, extracted the bones of the fœtus. The woman recovered, and had a child afterward.

The other is in No. 461, p. 814, by Dean Copping, of a woman who went with child for seven years, till she became again pregnant, and proceeded to the ninth month; about which time there was a tumour about the bigness of a goose-egg, an inch and a half above the umbilicus, which broke of itself, and from a small orifice discharged a serous fluid. She had a midwife, and three or four physicians, who gave her over; she therefore sent for a butcher! When he came, an elbow of the child presented to view at the opening of the tumour; and, at the request of the woman, and friends, to relieve her, he made a large opening both above and below the navel, which enabled him to fix his fingers below the jaw of the fœtus, which he easily extracted. He afterward, observing a black substance, introduced his hand into the opening, and extracted piece-meal the bones of another fœtus, and several pieces of black mortified flesh. She recovered, and was able to pursue her domestic affairs, only she had an ex-omphalos ever after.

No. 275, p. 1000, is an account of the greatest part of the fœtus voided by the navel, several weeks after a midwife had delivered the secundines, which she took for a mola, on her finding no child, by Mr. C. Birbeck. And in No. 302, p. 2077, Sir Ph. Shipton communicates a case in which part of the bones of a fœtus were voided through an imposthume of the groin.

In *Phil. Transf.* No. 243, p. 292, we read of a woman who was delivered of a child, and continued indifferently well for two or three days after; then new pains came upon her, and for three weeks together, there came from her daily some quantity of corruption, with pieces of flesh and skin; and she continued dangerously ill for about eight weeks, at the end of which time she was relieved.

After two years she began to breed again, had three children in three years following, all which were drawn from her by violence. During her lying-in with the last of these three children, some bones of a fœtus came from her; after this, divers other bones came away with her catamenia, and several, amongst which were sundry parts of the skull, and some of the larger bones of the body of a fœtus, worked their way by degrees through the flesh above the os pubis. The woman was alive several years after.

Dr. Ch. Morely, in *Phil. Transf.* No. 227, p. 486, describes the case of a woman, who after having had children, being again pregnant, was invaded with the expected labour-pains, which in a few days went off; but the tumour in the abdomen remained. She returned to her usual employ, continuing for more than a year without being freed from her burthen. At last a bone was discharged, not through the uterine passage, but by the anus; and, after some interval of time, many other bones were in like manner evacuated; for so long as the woman had exceeded her due time of gestation, so long was she in discharging the bones by stool; which were all kept in a box, in which they appeared so very numerous, and with so many distinct skulls, as might induce every one

one to believe that three foetuses had lain so long buried in the uterus. The woman did well; but two years after, riding to some distance, the wound was broken open again by the violent shaking of the horse, of which rupture she expired.

Mr. Bernard Shiever, in Phil. Transf. No. 385, p. 172, writes of a woman of forty-one years of age, who conceived in July 1720; and having gone seven months with child, though sometimes she had her menses in a small quantity, she perceived her belly lessen, with only a kind of pressure remaining in her right side: a month after, she conceived again; and in December 1721, was delivered of a dead female child, of a proper size: from that time she kept her bed till June 1724. In May, happening to go to stool, she felt a pain in the anus, as if the rectum would drop from her; and endeavouring with her fingers to relieve herself, she extracted a piece of the cranium as big as a Swedish crown, and at the same time two ribs were found in the close-stool; and fourteen days after the rest of the bones were voided in the same way, of an excrementitious colour. The woman did afterwards very well, and was the mother of three children; she also had her menses naturally.

In the Phil. Transf. No. 477, p. 529, is a letter from Mr. James Simon to the president, concerning the bones of a foetus voided *per anum*.

A curious and worthy clergyman of the county of Armagh, sent me some time ago a parcel of bones, with the following account of them, viz.

Rose, the wife of Mortaugh Mac Cornwall, of the parish of Tullylish, barony of Clare, being in the 37th year of her age, and mother of several children, conceived as usual; but in two or three days after, felt an excessive unnatural kind of pain in the matrix; which continued with frequent faintings, a depraved appetite, and an exceeding great weakness, till her child quickened; after which she proceeded reasonably well in her pregnancy to the end of nine months; and then her child was alive, and every thing right, as the midwife thought. She fell in labour, which lasted, with proper child-bearing pains, for twenty-four hours, but could not be delivered; and her labour leaving her, the child was no more observed to stir. In a month after, her labour returned, and with many regular throws continued twenty-four hours more; but to no purpose, save the discharging of some quantities of black corrupted clots of blood; of which kind also she threw up much by vomit: then her labour left her entirely; and soon after, she felt the decaying of the flesh of her infant, and the discharge thereof both at the matrix and anus, with so putrid and deadly a smell as was extremely nauseous both to herself and others about her. Thus she lived for upwards of twelve months, and at that period her pains increasing to excess, she began the discharges of the bones, which, to the number of eighty and upwards, she voided wholly by stool; fourteen the first day, and two, three, or four at a time afterward, for the space of twelve months, or more, with most intolerable pains at the voiding of each bone, especially a broad piece of the skull, which occasioned excruciating agony: so that from her conception to her death, she lingered near four years; during which time never was a more calamitous creature: for three years scarce a day without suffering most exquisite torture, being also attended with frequent faintings, a continual want of appetite, and an almost perpetual looseness, insomuch that it was miraculous how she lived, not eating in all that long space so much as would have sustained a sucking child; even the very liquids at length not lying a moment on her stomach; by which means she became quite emaciated, and dismal to look at, not being

being able to move from one posture to another, or to be moved without fainting at every the least touch or motion. The truth of all which I attest to you, as I received it partly from the poor woman herself, and partly from my wife, who visited her frequently during her illness.

In the same Transactions, No. 485, p. 121, we find a letter from Mr. Francis Drake, surgeon, F. R. S. to Martin Foulkes, Esq. concerning the bones of a fœtus discharged through an ulcer near the navel.

## S I R,

HAVING a call from hence into Lincolnshire lately to see a patient, the apothecary who attended him informed me, amongst other things, of an extraordinary case which had happened in that neighbourhood a very few years ago: I have since been informed, on enquiry, that it has not as yet been represented to the Royal Society; and therefore I hope you will do me the honour to lay this account of the case before them.

Jane, the wife of James Burman, labourer, at Scawby, near Brig, in Lincolnshire, was about twenty-nine years of age when she married. About two years after, when she had had a child at full time, she conceived again, and went regularly on for four months. She then got a fall; and about three weeks after felt a load in her belly, which continued on the right side of the same for between two and three years. The woman then grew very big of another child; which pressed so much upon the lump as to give her great uneasiness. However, she went on to her time with her double burthen: and three years and a quarter after the accidental fall she was delivered of a live child at full growth: from which time she grew worse and worse, with violent pain about the navel, and an inflamed tumour appeared near the part. Upon application to a neighbouring surgeon, fomentations were used, which produced a suppuration at a small breach near the navel. The surgeon did not know what to make of this swelling, and therefore did not venture to enlarge the orifice; but it continued discharging a fœtid purulent matter for three or four months longer. About a year or more after her last delivery, the woman was suddenly seized in the night-time; and a hardish mass of flesh, seemingly about eight inches long, was discharged through the old opening in her belly. The lump was rather thicker than an ordinary man's wrist; and being opened, contained all the bones of a fœtus about four months growth. At this time the woman was much emaciated, occasioned by the large discharge of pus from the wound; and what is much more extraordinary, whatever she eat or drank came half-digested through the opening; white bread, or better diet, came through in that manner; but coarse rye-bread, or such like, were not digested at all; for which reason the poor woman must inevitably have perished, had she not been supported by a charitable gentleman's family in the village with diet fit for her miserable circumstances.

She continued to discharge her excrement in this manner for six months, and then that symptom left her; after which the ulcer was kept open other six months, when it dried up of itself naturally, with a very firm but small cicatrix.

I had the curiosity to see this woman; and Mr. Charlesworth, surgeon and apothecary at Brig, sent for her. She appeared hale, strong, and in full health. I had the above account of her case from her own mouth, attested by the surgeon who attended her. I saw the bones of the fœtus in Mr. Charlesworth's possession, perfectly white, and, I believe, not one wanting. The woman farther told me, that nine months after the wound



was healed; she was delivered of another live child at full time, but with great difficulty. The whole time that the bones of the fetus may be supposed to have lain in the woman's belly, was about four years and a half. Thus, Sir, I have drawn up the account as well as I can, but very inaccurately. I have purposely omitted terms of art, in order to make myself better understood by those who are not surgeons or anatomists. There are several particulars in the account which I cannot reconcile to any natural laws that I am acquainted with. However, as the truth of the whole is incontestible; it shows most evidently what wonderful things nature can do with proper assistance.

In No. 486, p. 131, is related a case and cure of a woman from whom a fetus was extracted that had been lodged in one of the Fallopian tubes; sent from Riga by Dr. James Mounsey.

### NUMB. II. CASE I.

*Of miscarriages proceeding from the separation of the placenta, and a distention of the collum and os uteri.*

A WOMAN, in the second month of her second pregnancy, starting out of bed in surprise; felt something as it were give way; and instantly miscarried; with a large hæmorrhage that soon ceased.

### CASE II.

I WAS, about nine o'clock at night, called to a woman three months gone with child; whom I had formerly delivered. In the morning she had been seized with a flooding, in consequence of a fall down stairs; upon which she was put to bed, bled; and took some tincture of roses, with syr. e meconio; and the discharge abated a little; but returning with greater violence in the evening; a gentleman of the profession, who lodged in the house, prescribed another venæsection, together with styptic medicines; such as the tinct. antiphthific. alum. and sang. dracon. When I arrived, she was exhausted, faint, and pale; the os uteri being close, though she had the appearance of slight pains, that recurred at long intervals. As the danger seemed pressing, and all the common methods had been tried without success, I took the hint from Hoffman, and stuffed the vagina tight with fine tow dipped in oxycrate, which immediately stopped the discharge: I then prescribed an anodyne draught, with five drops of the tinct. thebaic. and two drachms of the syr. de meconio; and directed her to drink frequently of chicken-broth. She dozed a little, and between her dozings had, every now and then, slight pains, though the flooding did not return. Towards morning, the pains grew so strong that the tow was forced through the os externum, together with the abortion, about the size of a goose-egg, and some coagulated blood. I have since successfully used the same method in several cases where the flooding was violent. Indeed the strong pressure in the vagina seems to dam up the internal flooding, which, by distending the uterus, brings on labour-pains.

### CASE III.

A WOMAN, ten weeks gone with child, was taken with slight pains and a flooding. The os uteri would hardly admit the tip of the fore-finger; nor did the opening increase, though the discharge grew more violent

lent at every pain. The patient being exhausted by the great loss of blood, was directed to take pill. Matth. gr. x. in consequence of which the pains and flooding abated. Toward morning she enjoyed some rest, and fell into a breathing sweat; and, next day, was much easier, her pulse being raised, and the discharge having acquired a pale colour. On the second day it was no longer of a red hue; and the next day, while she sat on the pot making water, the secundines slipped away without pain, the membranes having been broke, and the embryo almost entirely dissolved.

She had twice before miscarried in the third month; and in six months after the last of the two miscarriages, conceived again. As the former abortions had probably been owing to a costive constitution and hard straining at stool, she was bled six weeks after conception; and the same evacuation, to the quantity of six or eight ounces, twice repeated, at the interval of a month. At the same time, she was directed to take frequently at night, elect. lenitiv. *zij.* or two spoonfuls of the ol. amygdal. d. mixed with an equal quantity of the syr. violarum, so as to procure an easy passage every day. By these means she held out to the end of the seventh month, when she was delivered of a child, which is still alive. In the fifth week of her next pregnancy, she was bled to the quantity of eight ounces; but neglecting to undergo the same evacuation at the period of another month, and being exposed to some severe exercise, she was taken with a pain in her back; of which she was relieved next morning, by losing eight ounces of blood from the arm. However, she happened to over-strain herself again; and the pain returned with a flooding, which occasioned a miscarriage in the fourth month.

#### C A S E IV.

I WAS called to a gentlewoman who had been several years in a bad state of health, occasioned by frequent collections of matter somewhere about the outside of the uterus; which discharging itself into the vagina, flowed from thence in large quantities. During this complaint she had boren three children, and now was seized with pains about the os pubis, together with a difficulty of making water and in going to stool; which she imputed to her old disorder. She had felt some symptoms of pregnancy, such as sickness and retching in the morning; but, as the menstrual discharge was regular, she could not think herself with child. Nevertheless the pains increased, and she was suddenly delivered of a child in the beginning of the fifth month; which, though not above four or five inches long, lived some hours. The secundines did not come away, nor was there any discharge of blood; circumstances which plainly proved that the placenta still firmly adhered to the uterus; and as it was impossible to introduce the hand, I thought it advisable to leave it to come away of itself, especially as the patient was free from pain. A clyster was administered; after the operation of which she took an anodyne draught of aq. cinnam. ten. & syr. de meconio, and enjoyed good rest that night. But her pulse being rather too slow, I prescribed the following draught to be taken three times a day, in order to quicken the circulation:—*R* Aq. cinnam. ten. *ziss.* Pulv. contrayerv. com. *℥j.* Castor. sal. volat. succin. *ā gr. v.* Syr. croci. *q. s. f. f.* haustus, 8va. quaq. hora sumend.

By this julep a slight fever was produced; on the fifth day a flooding began, and the placenta being separated, was easily delivered. The flood-  
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ing being at first pretty violent, was restrained by repetitions of the anodyne draught; and before the secundines came away, she received a clyster every night. After this miscarriage, she enjoyed a better state of health than before.

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C A S E V.

**A**N unfortunate woman of the town miscarried in the fifth month; and the midwife, from a mistaken notion, that if the placenta is not immediately delivered, the patient must die, had tried to pull it away with such force as produced a violent flooding, of which she died.

This was likewise the case of another woman, who being delivered in the seventh month, died instantly of a flooding, occasioned by a violent separation of the placenta. These instances ought effectually to caution practitioners against using violence, either when the uterus is but little distended, or when the placenta adheres too firmly to be separated with moderate force.

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C A S E VI.

**I** WAS called to a woman four months gone with child, on the eleventh day after the eruption of the small-pox. She was then taken with pains; but being delirious, her case was not known until the nurse observed blood upon the clothes. I found the os uteri considerably opened; and the discharge being great, and attended with frequent trainings, I broke the membranes that were pushed down with the waters. This expedient stayed the flooding; the fœtus was soon delivered, and had no mark of the small-pox; and the secundines came away in two hours. But the discharge had sunk the pustules, which were of the confluent kind, and could not be raised again. She died in a few hours after the miscarriage.

In the German Ephemerides, *anni primi*, l. iii. p. 139, there is an account of a woman who had the small-pox before she was delivered; and the child was marked with the same disease.

In the Phil. Trans. No. 493, p. 233, is the case of a lady who was delivered of a child, on whom the small-pox appeared in a day or two after its birth; drawn up by Cromwell Mortimer, M. D.

In the same Transact. No. 493, p. 235, are some accounts of the fœtus in utero being differently affected by the small-pox; by William Watson, F. R. S. also at No. 337, p. 165. *Vide* La Motte, observ. 129.

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C A S E VII.

**I** ATTENDED a woman who was very much weakened by a constant draining of blood from the uterus for above four months, which had begun two months after conception. I found her pulse low, her countenance pale, and the whole surface of her body affected with a small degree of anasarca. She was directed to take hartshorn jellies, with strong red wine; and afterwards being seized with labour-pains, and an increase of the flooding, I prescribed five grains of pil. Matth. which were repeated every hour, until the pains and violence of the flooding abated. The os uteri being open, and the membranes pushed down with the waters, these last were pierced with a pair of scissars; and the waters being discharged, the uterus contracted so as that its vessels no longer poured forth their contents, and came in contact with the body of the child, which was delivered when the pains returned. About one-fourth of the placenta was then



emaciated, and covered with clotted blood, which had taken the form of a white thick membrane, and lay betwixt it and the uterus; while the rest of the placenta was plump, red, and covered with fresh grumes of blood. The emaciated part had been separated at the beginning of the flooding, and the other in time of delivery. The child was alive, but very small, considering it was born in the seventh month.

### C A S E VIII.

*Communicated in a letter from Mr. Jordan, at Folfstone.*

THE woman was four months gone with child; had been troubled with a slight flooding at times for the space of three weeks, and miscarried of the fœtus about an hour before Mr. Jordan arrived: and he understood that the funis had separated from the placenta, and come along with the child.

The patient was low and faintish, having been very much fatigued by the midwife's trying to extract the secundines: and she had bearing pains that frequently recurred, together with a slight flooding, which, however, was very inconsiderable. He directed her to drink frequently a little caudle, and prescribed an opiate; by which her spirits were recruited, and the pains for the present removed: but these soon returned after she had enjoyed some rest.

Upon examination, he found part of the placenta in the vagina, so that the os internum was kept open; and that part which remained in the uterus adhered so closely to it that he could not separate it without some difficulty. Immediately after this separation, the woman was eased of her pain; but some time elapsed before she recovered her strength. Many cases of this kind have occurred in my practice.

When the hæmorrhage was altogether stayed, or continued in small quantity, after the delivery of the fœtus, the secundines commonly were expelled by the after-pains. But when the woman's strength was in danger of being impaired by the flooding, I always endeavoured to bring them away with my fingers; and when these would not reach them, employed the blunt-hook for the same purpose: nay, when both these expedients failed, I have restrained the flooding by prescribing opiates from time to time; and afterwards have found it more easily brought away, if it did not come of itself.

If part of the placenta is come down into the vagina, I cautiously avoid separating it from what remains in the uterus, because in that case the os uteri would contract, and retain it for a longer time. Whereas the os internum is kept open, and irritated by the protruded part, so as to occasion every now and then a pain which helps to separate and force down the other.

If the placenta lies loose, though kept up by the contraction of the os uteri, and there are no pains to force it down, I open the os internum so as to admit two fingers, and bring it away with the blunt-hook: but even this method has failed, and a draining has continued for several days. I have opened the os externum so as to introduce my hand into the vagina; and insinuating two fingers into the uterus, have separated the adhesion. Then, if I could not pull down the placenta with my fingers, I have introduced the hook along with them, and turning the blunt point above the separated cake, extracted it without farther difficulty, taking care all the time that the point was towards the placenta, and did not touch any part of the uterus

uterus. I have tried to extract it with the polypus forceps; but seldom effected the extraction without difficulty, because this instrument takes more room, and is not so easily managed.

There is very rarely occasion for any assistance of this kind, which should never be used except when the patient is in danger from long-continued drainings.

### C A S E IX.

*Communicated by the same gentleman.*

A WOMAN about five months gone with child, was taken ill with a slight flooding, which was restrained by taking eight ounces of blood from her arm, keeping her quiet in bed, and giving her opiates from time to time. Yet, on the least motion, the discharge returned; and, in about five or six days, labour coming on, she was safely delivered of the fœtus and secundines by the labour-pains; but it was a long time before she recovered her strength.

### C A S E X.

I WAS called to a woman who was seized with a pretty large hæmorrhage, and miscarried in the fifth month. The funis and membranes were expelled at the same time, but the placenta remained; and though the discharge abated, a draining of blood continued to weaken her, for the space of three months after her miscarriage, when I was called, and found her pulse low, her countenance pale, and her body emaciated.

Feeling the os uteri very rigid, but so open as to admit two fingers, I ordered her to be laid in a supine posture across the bed, and gradually dilated the os externum, so as to introduce my whole hand into the vagina. I then tried to dilate the os internum, but without success. However, my hand being in the vagina, I could now introduce my two fingers so as to feel the placenta, which was strongly compressed by the uterus into a consistence of a scirrhus substance, about the size of a large walnut or pigeon's egg. This I separated all round with my fingers; but as I could not bring it down, I introduced a long narrow-pointed forceps, which, however, did not succeed: finally, I had recourse to the blunt hook, with which I brought it away in three separate pieces. The draining was stopped, the woman recovered, and afterward bore children. In this case the placenta, instead of increasing and forming a mola, according to the notion of some old writers, was squeezed into a small, round, compact substance, almost as solid as a cartilage.

### C A S E XI.

*Communicated by Mr. Hengeston, in a letter from Ipswich.*

HE was called to a woman in the fourteenth week of pregnancy, found her much weakened by a flooding, and was told she had been four and twenty hours in that condition: on touching, he felt the body of the uterus almost even with the os internum, the os externum forward above the pubes, and the fundus uteri backward, and close to the lower part of the rectum at the os coccygis.

The woman lying on her side, he dilated the os externum, and introducing two fingers into the os internum, which was a little open, broke the membranes,

membranes, in hopes that by diminishing the contents of the uterus he might stay the hæmorrhage; but, after having waited fifteen minutes to little purpose, he again introduced his hand into the vagina, and with his thumb in the os uteri, and his finger pressing backward against the fundus, he pulled down the first, while his fingers pushed up the fundus above the os sacrum; upon which the contents of the womb slipped into his hand.

The patient recovered, but laboured under a prolapsus vaginæ, occasioned by a former severe labour. She is now again with child; and finding the uterus lying in the same position, he desires my advice, in order to prevent another miscarriage from the preternatural lowness of the fundus, which he apprehends will hinder the uterus from stretching.

I advised him to try to raise the uterus higher, and keep it up with a round pessary, or rather with one of that kind which have necks, and are kept up with straps tied to a belt that goes round the woman's waist, *vide tab. xxxviii.* I likewise counselled him to bleed her, by way of preventing a flooding, if her constitution can bear that evacuation, and to keep her body open.

Mauriceau, in *observat. 385*, describes a miscarriage from a woman being too much shaken in a coach.

He attended a woman who had miscarried an hour before, of a small child of four months, which he judged from its corruption to have lain eight or nine days dead in the womb, before nature of itself expelled it. The body of this fœtus being very small, and quite shrivelled, had for that reason very little dilated the internal orifice, so that he had no room for the present to bring away the after-birth; and therefore left it to nature, which did the business twelve hours after. For he judged it better to do so, than to offer violence to the womb, by dilating so much as was necessary for extracting this foreign mass. This misfortune was owing to the woman being too much shaken and agitated, by always using a very uneasy coach.

In *observ. 614*, we are told he delivered a woman who had miscarried two hours before of a fœtus of three months, which had been dead eight or ten days, as appeared by its corruption. The midwife, for want of sufficient knowledge in her business, being incapable of bringing away the after-birth, so excessive a flooding was excited by its retention in the womb, that the woman must have run a great risk of her life, if he had not speedily delivered her of it, and so put a stop to the flooding; after which she did very well.

In *observ. 694*, we find he delivered a woman of the after-birth of a small fœtus of two months, of which she had miscarried three hours before without any manifest cause; the after-birth being retained in the womb after the expulsion of the fœtus, occasioned such a flooding, that the woman had several times fainting fits, from which she recovered as soon as he had delivered her of that foreign mass; for the flux then ceased, and the woman did very well. This was the eleventh child of which she had miscarried.

In *observ. 477*, he says, he attended a woman who was near the brink of the grave, it being the third day since she had miscarried of a child of four months, whose after-birth was left entire in the womb; for the midwife was not able to deliver her of it, because of the great difficulty she found, as she told him. Whence that foreign mass, there remaining for three days, had caused a prodigious flooding; and as nature had not yet expelled it, there was no hope of bringing it away but by violence, because  
the



the womb was quite closed when he saw the woman. It turned at length to a most virulent putrifaction, which caused a continual high fever, with two or three exacerbations every day, accompanied with faintings and other symptoms usual on these occasions. But for all these disorders, and a bad diarrhoea besides, she recovered her health, after a most grievous and troublesome fit of sickness for five weeks. He had some years before attended the same woman, when she was extremely ill in the like manner, after another miscarriage, where the after-birth had been likewise left behind, the midwife not being able to bring it away; and it was expelled by suppuration like this last.

In observ. 550, he tells us he delivered a woman of a male infant, five months and a half grown, who was still alive, though the mother had laboured under a moderate flux of blood, which was almost continual, for the space of two months, increasing at last to such a degree as to hazard an abortion.

In this situation, he advised the woman to keep her bed, or at least her chamber, that so she might, if possible, preserve her great belly to the end of the term. But, instead of hearkening to his good advice, she undertook a journey in a coach, which was the direct way to destroy her infant, who lived but half an hour, though the mother was as well after he had delivered her, as if she had lain in at the end of the natural term.

In observat. 292, he says he attended a woman who had miscarried of a dead child in the sixth month, by being jolted in a coach. Twelve or fifteen days before this accident, she had been too much shaken and jumbled on the road in travelling. This brought upon her pains in the belly, which lasted all that time, till at the end her waters flowed off in great abundance without any real pain. As the infant presented an arm, the midwife believing at first sight it was the foot, took no care, but drew it out as far as the shoulder, which put the child in a more unnatural posture than it was before. In this situation of affairs, being ordered to attend the woman, he pushed back the arm into the womb; but as all the waters were entirely run off the day before, and the orifice of the womb was too strait, and too dry for him to introduce his hand without violence, in order to turn the child, he judged it more prudent to trust nature with the expulsion of it, than attempt it with a too forcible extraction; plainly foreseeing, that since it was very small, it might easily come away in the same posture it was in, when the womb should be sufficiently dilated; because the woman had already been mother to a child that was full grown, and gone out her term. It happened as he foretold, twelve hours afterward, nature of its own accord expelling the child, by means of some pains which were excited by a clyster he had prescribed, and which had sufficiently dilated the orifice. But the midwife who staid to attend her, missing the opportunity, let the womb close of itself, and could not bring away the after-birth, which remained six hours longer, after which nature of itself expelled it, as it had done the child; and the woman being thus happily delivered, did very well afterward. He did not know, but if he had tried to take away the child by force, as he was desired when he first came, the violence he must have used in dilating the orifice, so as to be able to introduce his hand, might have been very prejudicial to the mother, whom he preserved by prudently committing this business to nature, for reasons declared above.

In observat. 28, he tells us he attended a woman six months gone, who, for eight days past, had a moderate flux of blood, in which were some clots, occasioned by the shocks of a violent cough, which had enlarged the orifice

of the uterus to a finger's breadth. For this reason he told her she would certainly miscarry in a little time, although she felt no pain at present, because he was assured, from the opening of the orifice and discharge of blood, that it was impossible for the agitation of so violent a cough not to accomplish the mischief it had begun. The event answered his prognostic; for the next day the woman miscarried of a child, which lived but a day and a half.

In observat. 164, we find; that he attended a woman who had miscarried three hours before of a dead child of four months. Three weeks before this, she had received some hurt in a crowded church, from which time she always felt great pains in her belly; and about the ninth day after this accident, began to void a little blood. From that time she never felt her infant move, but had the misfortune to lose it without the after-birth, which remained behind, the midwife not being able to bring it away, because the womb closed immediately on the expulsion of the child. Having himself examined whether there could be any means found out to ease this woman, and having discovered that the orifice of the womb was only open enough to receive one finger, he judged it the safest way at present to trust nature, and postpone the doing her any violence; by endeavouring to extract this after-birth by so narrow an orifice, the remedy in this case appearing to him worse than the disease. So he deferred it till the next day, when, finding the womb much more dilated; he happily delivered her of her burthen; and though she had at that time a fever upon her, she did very well afterward.

In observat. 508, he writes, that he attended a woman who just before miscarried at the end of two months and a half, of a small foetus no bigger than a bee, which nature had expelled with a considerable quantity of blood, which had been preceded by a distillation of reddish serosity for several days. When he was called to deliver her of her after-birth, he found the womb was entirely shut, and that there was no way to bring it off but by violent means, which might be more prejudicial to the mother than the relief he could promise her from the extraction would have been beneficial. For this reason he thought proper to trust nature with the business; which was not accomplished till the twelfth day after, the foreign mass lying all the while in the womb, and was then expelled half suppurated, after which the woman did well.

The principal cause of this abortion, as he supposed, was a great costiveness in the time of pregnancy, which in this woman was so extraordinary, that she was sometimes fifteen whole days without going to stool; so that the great efforts she made to ease herself of excrements, excessively baked and hardened by so long a stay, did at the same time very forcibly compress the womb, which might very well be supposed to shake and loosen, and at last expel the newly-conceived foetus; as was the case of this woman, who had miscarried several times before.

*The following cases are from La Motte.*

Observat. 129. The small-pox which raged in Valognes some years ago, was more fatal than general, most of those that caught it dying of it. Among others, a lady of distinction, six months gone with child, or thereabout, fell ill with it. All went exceeding well; the fever was moderate; the pustules large, raised, and white; when on a sudden she was taken with a convulsion: in less than half an hour the pustules went in, and her whole body turned black and mortified. He happening to be there

by chance, gave her a few spoonfuls of wine; some pains followed, and he delivered her immediately of a live child, who died soon after; another convulsion came on, and she died.

Observat. 151. A young woman that lived two leagues off, having reached the fifth month of her pregnancy, found herself ill, as she thought, with the colic. Her mother sent for him in haste, lest she should be in labour, as she really was, for he found her brought to bed of a child of five months, who was still alive when he came. As the placenta had followed, he left her to the care of her mother. This young woman being again with child some time after, miscarried about the fifth month, and so suddenly, that they had not time to let him know of it: she came off as well this time as before. Being a third time with child, she was exceedingly watchful over herself, to do nothing that could produce a miscarriage. He bled her three times in the six first months, and kept her to a very regular moistening diet. She carried her child to the seventh month; it lived but a few days. He imagining it was owing to her regularity that she carried this child longer than usual, she resolved to be still more cautious the next time. To that effect, he bled and purged her twice, after her getting up from this lying-in. He repeated the bleeding as soon as she was breeding, and kept to it every month. He kept her to a cooling moistening diet, not suffering her to eat any thing roasted, nor to drink any strong liquor. Whether it was owing to this conduct, or any other reason, she was not brought to bed before the ninth month, and her labour was easy, as it happened also twice after this. But being with child again, and more disordered at the fifth month than she had been in the ninth in her three preceding pregnancies, she was at six months seized with labour-pains, and the waters came away. She sent for him, and he delivered her in a little while of two little boys, who were alive, but died soon after. He afterward brought away a large placenta, common to both children, and she soon recovered. He has several times since laid her of one child only, whom she has carried her full time without any inconvenience.

*What follows is from Gifford:*

Case 118. He was sent for to a poor woman in Knaves-Acre, the wife of a smith. She was about six months gone with child, and had been seized with a flooding some days before, for which her midwife had lately come to consult him; when he ordered an astringent mixture to be taken, to the quantity of three or four spoons, now and then, and a quieting astringent draught, to be continued every night, in case her flooding did not stop. He likewise desired they would give him an account of her the next day; at the same time telling the midwife, that in case it continued, the only means left to save her life was to deliver; but as the method here prescribed had, in some measure, the desired effect for the present, he heard nothing farther for two or three days. Her flooding, however, returned again, her husband came to him, and desired he would visit her; which accordingly he did, and, upon examination, found the os internum not dilated enough to receive the end of one finger, and not easily to be dilated; wherefore he advised a repetition of the medicines before prescribed; and, on the next day, the man called again to tell him that the draining continued, but was not so violent; however, as she became weaker, he desired he would see her. He then found the os internum as it was the preceding day; and as he could not dilate it with his fingers, he advised a conti-



nuance of the mixture and draught. On the third day, the midwife sent him word, that the draining continued, but that the os internum was dilated somewhat more than the preceding day ; which gave him encouragement to hope that he might dilate it wide enough to pass his hand and bring away the foetus. Upon his touching, he found an opening large enough to admit the end of three fingers ; wherefore he endeavoured to dilate it with his fingers, and stretching them wide from each other, he got in his thumb, and afterwards his whole hand. The first thing he met with was part of the placenta separated from the uterus, and passing his hand by it he felt the child inclosed in the membranes, and floating in the waters. He readily broke the membranes with his fingers, and passing his hand within them, soon met with a leg, which he drew out, and taking hold of it with a soft cloth, he gently pulled toward him, at the same time advising the woman to assist by bearing strongly down. By this method he presently extracted the foetus whole and entire ; he was indeed afraid, as it was very tender, that the limbs would have separated from the body ; the placenta readily followed, being before in part, if not wholly, separated from the uterus ; the flooding stopped immediately on the delivery.

Mr. Giffard gives a history, in case 157, of a foetus above six months old, contained in a sacculus without the womb, and protruded through the anus. *Vide Extra-uterine foetuses, collect. v.*

Mr. Chapman, in p. 206, gives the case of a child that was delivered at the anus about six or seven months old.

There is likewise an account of an abortion, by Dr. Monro, in the Medical Essays of Edinburgh, vol. ii. p. 235. And of hæmorrhages of the womb, stopped by pulv. styph. Helvetii. vol. iv. p. 38.

*To these it will not be improper to add some examples from Hoffman.*

In part. iii. p. 183, observ. i. we read of a woman fifty years of age, the mother of several children, who miscarried in the third month of her pregnancy, from a violent fright and cold to which she exposed herself. There followed immediately a violent flooding ; after this she laboured under an uterine hæmorrhage, which sometimes stopped for a little, but immediately broke out again ; her belly swelled, and she had frequent palpitations, which made her suspect her being again with child, till a year had elapsed. The tumour of her belly was sometimes tense and hard, at other times soft, her feet swelled in the evening, and she felt a weight in the hypogastric region.

Various carminative laxatives and clysters were in vain administered ; but after three days use of the caroline mineral waters, the hæmorrhage stopped, and by continuing to use them, she evacuated a great quantity of viscid matter, both by stool and urine, and the swelling of her belly subsided. Wherefore she entered the bath ; and after once bathing, had violent pains and spasms, just like those of a woman in labour, and evacuated from the uterus some flesh-like membranous bodies, commonly called molas ; after which she perfectly recovered her health.

In part iii. p. 183, observ. ii. we have the case of a young woman of a lax habit of body, who had miscarried four times in the third and fourth months of her pregnancy. Being with child a fifth time, she was bled in the third month. About her ordinary time of aborting, she found spasms, flatulencies, and compression of her loins and abdomen, such as she was used to have formerly when she miscarried ; which, however, were removed by some  
antispasmodic

antispasmodic medicines, by embrocating her abdomen with his balsamum vitæ, and by the application of toasted bread to the umbilical region. She had some spasms and pains in the seventh month; but kept her burthen till the ninth month, when she brought forth a live child.

She conceived again, and, by being bled in the third and seventh months, carried her child to the full time.

In observ. v. p. 185, we find that a strong woman, thirty years of age, who had had two live children, but afterward suffered six abortions, two in the seventh and four in the fifth months, being again pregnant, had an uterine hæmorrhage in the third month, and was again threatened with abortion; but by letting blood immediately, the hæmorrhage ceased; by repeating it often, and drinking nothing but pure water, taking some of the testaceous powders, and by applying Barbett's saponaceous plasters, with some of the oleum hyoscyami to her loins, she brought forth a live child at the full time.

Hoffman imagines the former abortions to have been owing to the woman being plethoric, and drinking strong wine for her ordinary drink, which she was used to do.

In part ii. sect. i. chap. v. *De Uteri Hæmorrhagia immoderata*, he relates the case of a woman of a healthy and plethoric habit of body, twenty-eight years of age, and three months gone with child, who was taken with a discharge of blood from the vagina, which continued, in a small degree, for fourteen days. But from using too violent exercise, she was taken with a profuse flooding, which threw her into faintings: after trying both internal and external remedies to no purpose, he being called in to relieve the patient in this extremity of danger, immediately stuffed the vagina with tow, dipped in a solution of the caput mortuum of vitriol; by which the discharge was in a very little time stopped; and by corroborating diet and medicines, her strength was recruited. The lint, three days after, was extracted with great difficulty, from its being matted and concreted with the grumous part of the blood; on which followed also a small flesh-like substance, with a little uncoagulated blood. By taking proper medicines, with a nourishing diet, the patient recovered; after which she was again pregnant, and safely delivered. He, in that part of his works where he treats *de convulsione uteri, sive abortu*, gives ten cases of abortions; and although his method of prescribing is different from the practice here, yet his intentions of cure are the same. He orders venæsection when necessary, together with astringents, opiates, corroborating and laxative medicines, according as the exigence of the case requires.

I find in practice, that the flooding commonly diminishes, and frequently stops, when the membranes break and the waters come off; though in some the flooding has continued, and in others has been immediately carried off, by delivering the placenta. This difference shows, that those who run into extremes, either in hurrying off the placenta in all cases, or in leaving its expulsion always to nature, err; for a practitioner ought to vary his method in these cases, as well as in others, according as it shall appear most proper; as in the foregoing cases of abortion from Mauriceau.

### NUMB. III. CASE I.

#### OF MARKS AND MUTILATIONS.

WHEN I desired the woman, mentioned in No. ii. case vii. to put out her tongue that I might examine it, in consequence of her complaint saying that it was dry and parched, I observed something on the tip of it like a

plum, of a green colour, hard and painful. She told me, that when plums begin to ripen, it grows larger, softer, and less painful; acquires a blue reddish, or purple colour; and she feels an hard gristly substance like the stone in the middle; in winter it shrivels and decreases, and next season resumes the same appearance. It seems, when her mother was with child of her, she longed for some plums, which she cheapened, but would not buy, because she thought them too dear; however, she had touched the tip of her tongue with one of them, which she afterwards threw down; and by this transient touch, the child was affected in the same place.

### C A S E II.

**I** DELIVERED a woman in the eighth month, of a child, from the outside of whose little finger on the right hand, hung an excrescence about the size of a nutmeg, resembling one of the small potatoes that are used for seed, both in the colour and little indentations on its surface; and some of the women affirmed the mother had longed for that food before delivery. The tumour dropped off in a few days, in consequence of a ligature tied round its neck; but the child had likewise a superfluous little finger on the other hand, and a supernumerary little toe on each foot.

Notwithstanding these examples, I have delivered many women with children who retained no marks, although the mothers had been frightened and surpris'd by disagreeable objects, and were extremely apprehensive of such consequences.

One woman in particular, when three months gone with child, was surpris'd, upon opening the door, by a beggar thrusting a bare stump in her face; a circumstance which alarmed her to such a degree, that she made herself and all about her unhappy, being fully persuaded that her child would be born with the same mutilation; and indeed she could scarce be convinced of the contrary, when she felt the child's arms after it was delivered.

Schenckius, in lib. iv. De Gravidis, from p. 621, to 625, relates several observations on the strange effects produced from the imaginations of pregnant women, occasioned by the different accidents that happened to them in that state.

In the Phil. Transf. No. 493, p. 205, is part of a letter from Mr. Ben. Coke, F. R. S. concerning a child born with the jaundice upon it, received from its father, and of the mother's catching the same distemper from her husband the next time of being with child.

*Vide* Ephemerides, ann. octav. observ. 46, and 55, anni 9 and 10, obs. 23. *Decuræ secundæ ephemeridarum*, ann. prim. observ. 40.

Mauriceau, in p. 288, and observ. 348, relates his having delivered a woman of a child whose head was of a monstrous figure, being all made up of face, as it were, with great gogling eyes. It had towards the occiput a fleshy mass, almost like the placenta, which seemed to come out of the cerebellum and nape of the neck. The mother had felt this child move in her womb with more force than her other children; but it was dead born, it having remained long in the passage, and afterwards been turned. The mother imputed its monstrous shape to her having fixed her eyes steadfastly on the figure of an ape.—*Vide* Philos. Transact. No. 456, p. 341, and No. 461, p. 764.

I have delivered many women who were prepossessed with things of this kind before delivery, which I have never yet found to happen as they imagined.



I delivered a child lately, who wanted all the fingers on one hand, a circumstance which was concealed from the mother for several days; and on asking her before she knew of it, she acknowledged that nothing extraordinary had happened to her during her pregnancy.

## COLLECTION XIII.

*Of the situation of the child during pregnancy, the signs of conception, and premature labour.*

### N U M B. I.

OF THE SITUATION OF THE CHILD IN UTERO.

[ Vide Part i. Book iii. Chap. i. and ii. ]

**D**URING a succession of many years, I have been called to women who miscarried in the fourth or fifth month, and generally found the head presenting. I was concerned in two cases where the arms came down, and were forced along double. I delivered a woman in the sixth or seventh month, with the waters and secundines unbroke, and there the head presented. In another I found the placenta presenting, and being forced down in the vagina, the head pushed it out after the membranes were broke. A woman in the sixth month was brought to bed of twins, and both children presented with the breech, and were so delivered one after another, by the labour-pains.

In the year 1751, Dr. Hunter opened a woman who died near her full time, and found the head presenting; the next year he had occasion to dissect another subject of the same kind, and found the child nearly in the same situation. In both cases, according to Mr. Oald's allegation, one ear was to the pubes, and the other to the sacrum.

From these subjects, some very accurate, useful, and curious plates, are published.

Dr. Camper, professor, of Franeker, in Friesland, opened a woman, in whom the child was situated in the same manner; and I find the head presenting so in almost all natural labours.

Dr. Monro showed me some drawings of a subject, which his father had the preceding winter dissected in the public theatre; tables of which are just published in Phil. Trans. of Edinburgh. This was a woman said to be six months gone with child, in whose uterus the fœtus lay in a longish form, with the legs and breech to the fundus, the head resting on the brim of the pelvis, and the fore parts of the child to the back part of the womb, though turned a little toward the left side. He observes, that though this fœtus, and those examined by Dr. Hunter, were found with the head downward, yet this does not seem to be always the case, for the children appear with their heads uppermost, and their faces toward the mother's belly, in one woman who died when eight months gone; in another who believed herself at the full time; and in a third, supposed to be in the seventh month, dissected by his father and himself.

La Motte, in chap. xxi. book i. gives three instances of pregnant women whom he had occasion to open.

In the first, who was six months gone, and died of an apoplexy, the head, hands, and feet of the child, occupied the inferior part of the uterus, while  
the

the back formed a kind of vault conformable to the shape of the womb, and the placenta was between them.

In the second, who being five months gone, fell into a fainting, of which she did not recover; the child lay across the uterus, with the legs bent up.

In the third, who died in the sixth month, of a fluxion upon her breast, attended with a continual fever, the child's legs and buttocks were toward the bottom of the uterus, and the head downward, as in natural labours.—*Vide tab. vi. vii. viii. and ix.*

*From Dr. Garrow, Barnet.*

SIR,

THE few following remarks I lately made on opening the body of a young woman just dead of a flooding, in the beginning of the eighth month:

1. The uterus, distended by the waters, placenta, and fœtus, appeared pretty much of an oval figure, prominent in the middle, and gradually flattening toward each side.

2. The fundus reached rather above the middle space between the navel and scrobiculus cordis, pressing up the omentum and intestines, so as to make it easily appear why umbilical ruptures are less troublesome to women in the last months of pregnancy.

3. The thickness of the uterus was about a quarter of an inch, as near as I could guess, without measuring.

4. The child lay on its left side, the head presenting; consequently the face and fore parts turned toward the mother's right side, though not directly, but rather inclining toward the os pubis.

5. The placenta adhered to the os internum nearly by its middle or thickest part; in which part I perceived a laceration upward of an inch long, and penetrating almost through the substance of the placenta.

6. There was not the least appearance of blood in the navel-string, except a few drops just by the child's belly; and I believe the whole quantity in mother and child, at that time, was very inconsiderable; but I had no opportunity of examining farther.

## NUMB. II. CASE I.

### OF THE SIGNS OF CONCEPTION.

I VISITED a woman who was attacked by a super-purgation in the third month of her second pregnancy, and dreaded a miscarriage. I prescribed opiates; by which her disorder was immediately restrained; but I could not distinguish the period of her gestation by the touch of the vagina, because the uterus moved easily up and down. She had undergone a regular discharge of the catamenia in her former pregnancy; and in this they had twice appeared; but her sickness at stomach, and retching, which she had before experienced, were the symptoms from which she concluded herself with child. The looseness was soon stopped; and she felt the motion of the fœtus in about six weeks, when the other disorders abated. *Vide tab. vi.*

## CASE II.

I WAS consulted by another patient, who had a regular discharge of the menses, without retchings, but suspected herself of being pregnant, by feeling a greater fulness about the third month. This, she supposed

posed might proceed from the bulk of the uterus, which kept up the intestines, and in five or six weeks after, her suspicion was justified by the motion of the child.

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### C A S E III.

A MIDWIFE consulted me about a woman supposed to be in the eighth month of her pregnancy. I was told she had been seized with a flooding, and in danger of miscarrying in the fifth month, when a gentleman of the profession was called, and used the common methods of restraining the discharge. This happened twice after; and bleeding, with restraints, were as often repeated. The midwife, observing that the patient was not so big as she expected to find her at that period, desired me to examine; and I proposed that the other gentleman should be called to the consultation; but was given to understand that he was dismissed, and would never be employed again in the family. The os internum was smooth; and with my finger in the vagina, I could easily move the uterus upward, and from side to side, while the lower part of the abdomen was perfectly soft. From these observations, I declared, that if she was at all pregnant, she could not be above three or four months gone; and she assured me, that if she was not in the eighth month, she could not be with child at all. I then concluded that she had been obstructed four periods, and that the return of the menses had been mistaken for a flooding: and this was certainly the case; for she continued regular, without any other symptom of pregnancy. The gentleman who at first attended her, had, a few months before this occasion, affirmed, that he could at any time discover whether or not a woman was pregnant, and tell the period of her gestation within eight days of the exact truth.

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### C A S E IV.

A MIDWIFE of Mary-le-bonne workhouse solicited me to go thither and see a girl about twelve years of age, supposed to be eight months gone with child, who was sent by the overseers of the parish to lie-in at the house. She told me, that several gentlemen of the profession, as well as midwives, had examined her; that one of them had offered to deliver her gratis, and some others had made great interest to be present at the occasion. I accompanied the midwife; and, first of all, examined the external parts; when finding the passage so small, that I could not introduce the tip of my little finger, I made no hesitation in declaring that she had never conversed with man. I found a large swelling betwixt the scrobiculus cordis and the navel, which appeared to be the liver very much enlarged. The uterus it could not be; for I pushed my fingers quite below it, and pressed in the parietes of the abdomen almost to the vertebræ of the loins. The girl had been advertised, and the matron had got money from numbers who went to see her; and notwithstanding my declaration, the farce was carried on, until people began to suspect the deceit, when she was sent to one of the hospitals for the cure of her hepatic disorder.

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### C A S E V.

A LADY sent for me to prescribe medicines for a favourite maid who was obstructed; and from whose florid countenance I immediately suspected there was something extraordinary in the case: for women troubled



troubled with simple obstructions of the catamenia, are commonly, in the sixth month of the obstruction, of a pale bloated complexion. With great difficulty she was prevailed upon to let me examine the state of the uterus by the touch; when I plainly felt the stretching of the womb in the vagina, as well as the circumscribed tumour a little below the umbilicus. By which circumstances, I was certified of her being six months gone with child.

In many cases, however, when the woman is fat, it is impossible to judge from this stretching till about the seventh or eighth month.

La Motte, in chap. xi. book i. gives several cases on the infallible signs of pregnancy in the last four or five months of uterine gestation.

Schenckius, in lib. iv. De Conceptione, p. 617, compiles, from different authors, several observations of young girls, who have conceived and bore children at the age of eight and nine, as well as of women pregnant after the age of three-score.

Hildanus, cent. 2, observ. 60, mentions a girl of eleven who had the menses; and in observ. 61, affirms, that this discharge continued in a woman to the age of seventy-eight.

In the Memoirs of the Academy of Sciences at Paris, H. 1710, p. 16, we find an account of a woman, aged eighty-three, who married a man of ninety-four, and was brought to bed of a boy at the full time.

### N U M B. III. C A S E I.

#### OF PREMATURE LABOUR.

A WOMAN, imagining she had gone her full time of a first child, sent for the midwife, who had attended her three days; the husband came, and desired me to order some medicines to quicken the pains; or, if I thought it more necessary, to go and see his wife. When I went to the house, I found the midwife at work in stretching the parts, and, to use her own phrase, in making room for the child to pass. I sat down to wait for a pain, during which I might examine; but nothing of that kind happening, I introduced my finger into the vagina, and felt the uterus quite light, without the least distention; nor was any stretching perceptible in the abdomen (*vide* tab. v.) I then declared she was either not at all pregnant, or very young with child, to the astonishment of all the women, who could scarce believe that the midwife, who was not a young beginner, could be so far mistaken. For their satisfaction, I desired they would send for another midwife, who confirmed my declaration. The woman had never been regular in her menses, of which but a little appeared at a time, and that seldom; and this small evacuation, in all probability, proceeded from her having been weakened by large discharges from scrophulous ulcers. However, in eight months after this period, she was delivered of a full grown child; and, in all probability, the uneasiness of which she complained, when I was called, was no other than breeding complaints.

### C A S E II.

A YOUNG practitioner in midwifery having attended a patient all night, sent for me in the morning, and told me that the os uteri was a little opened, that the membranes were broke, and the head presented; that the woman had slight pains, and he had tried to stretch the parts to no purpose. Upon examination, I found the os uteri open to the breadth of half-a-crown, but thick and rigid; and after having waited some time, observed that the pains were slight, and seldom recurred. This was her first

first child; and, according to her account, she wanted three weeks of being at the full time.

I told the gentleman, that, in my opinion, this was not real labour; and that the pains had been brought on by a looseness, with which she was attacked the preceding day. In consequence of my advice, she was bled (her pulse being quick) and took an opiate, which carried off the pains, though in three weeks the real labour came on.

### C A S E III.

I ATTENDED a woman come to the full time of her first child: she had for three days been subject to slight pains, which recurred every now and then: the os uteri was a little opened, but thick; and as the head presented, though the membranes had broke too soon, I resolved to allow some time for dilating the os internum. I therefore prescribed venæsection, a clyster, and opiate; in consequence of which she enjoyed a good night: but after I was gone, it was imagined I wanted to protract the case, and a call was given to a midwife, who affirmed, that had she been sent for at first, the patient would have been delivered before this period. The slight pains therefore no sooner returned, after the effects of the opiate ceased, than she began to stretch the parts, and fatigued the woman so much, that they thought proper to call me again in the evening; when finding the pains inconsiderable, and the os uteri, though more dilated, still rigid, I ordered the opiate to be repeated; and next day, the pains growing stronger, she was safely delivered.

### C A S E IV.

ABOUT six in the morning, I was called to a woman in her first pregnancy. The membranes were broke, the os uteri was considerably opened; but the child's head being large, rested above the brim of the pelvis (*vide tab. xii.*) while the vagina and os externum seemed very narrow and rigid. The midwife had fatigued the patient by putting her in several different positions. Her skin being hot and dry, and the pulse full and quick, she was bled to the quantity of ten ounces; a clyster was injected; and, after its operation, she took a draught with twenty drops of the tinct. thebaic. and two drachms of the syr. de meconio, which composed and threw her into a plentiful sweat. I was called again at night; when I found the midwife had persisted in fatiguing her: the head was advanced to the middle of the vagina, but the parts below were still very tight. I ordered the opiate to be repeated; she enjoyed good rest; and the parts being gradually distended, she was delivered next morning.

## COLLECTION XIV.

### *Of natural Labours.*

#### N U M B. I. C A S E I.

OF THE OS INTERNUM OPENED BY THE WATERS AND MEMBRANES.

[*Vide Tab. x. and xi.*]

I WAS bespoke to attend a woman in her first child, and received a call about the middle of the ninth month, when she complained of pains in her head and back; and I understood she was collic, and troubled with a tenesmus, which she mistook for labour-pains. After hav-

ing felt her pulse, which was quick, sat by her some time, and put the necessary questions to the nurse, I directed the patient to lie down on the side of the bed; and a quilt being thrown over her, placed myself behind, in order to examine. I found the os internum soft, but not open (*vide tab. ix.*) from which circumstance I declared she was not in labour: then I ordered her to be bled to the quantity of eight ounces, and a clyster being injected, she was relieved of her complaints. In a fortnight after this visit, I was again called, and found the labour begun; the os uteri was exceeding thin, and open to the breadth of half-a-crown; the membranes with the waters were pushed down by every pain, and the child's head rested upon the upper part of the os pubis. For three or four days she had been subject to slight pains, which returned at long intervals; then they became more frequent, recurring every two hours; and, by the time I was called, they had grown stronger, and came faster. As she was still costive, I prescribed an emollient clyster, by which the indurated fæces were discharged; and then the labour proceeded in a slow and kindly manner, the membranes gradually opening the mouth of the womb. I did not confine her to any particular position, but allowed her to walk about, and undergo her pains either sitting or lying in bed. The membranes having fully opened the os internum, and being pushed down in a globular form to the lower part of the vagina, gave way during a pain, while she stood leaning on the back of a chair; a large quantity of waters was discharged, and the child's head sunk down into the pelvis. This was her first child; she was of a strong constitution, and the external parts were very tight; so that I would not put her to bed until the head should have come lower down, and gradually opened the os externum. But these parts being pretty well distended, and every thing fast approaching toward delivery, she was put to bed, which was prepared by the nurse, and laid on her left side: at every pain the head advanced farther and farther; the remaining part of the waters was gradually forced down, so as to lubricate the parts: I then plainly felt the ear of the child at the pubis, the hindhead at the lower part of the left ischium, the lambdoidal suture crossing the end of the sagittal, and the fontanel on the other side higher up in the pelvis; at which part the sagittal was likewise crossed by the coronal suture. As the head advanced, the occiput was turned in below the os pubis; the soft parts of the mother, backwards, were protruded in form of a large tumour; the os externum was widened more and more; the perinæum lengthened to three fingers breadth, and the fundament to two: the crown of the child's head turned gradually upward toward the upper part of the labia, the forehead being backward at the lower part of the sacrum and coccyx: advancing still, the back part of the neck was felt below the pubes; then the perinæum being stretched to four or five fingers breadth, very tense and thin, I applied to it the flat part of my hand during each succeeding pain, in order to prevent its being torn, and let the head be delivered in a slow manner, by rising up with an half-round turn below the os pubis. The same pain that delivered the head, forced down the shoulders, which I helped easily along, with my fingers placed toward the arm-pits. I kept the child, after it was delivered, under the clothes, until it began to breathe and cry; then I tied and divided the funis, put a warm cloth round the head, and, wrapping it in a receiver, gave it to one of the assistants. The placenta was gradually forced down into the vagina, and extracted by pulling gently at its lower edge, and at the funis. The child was a strong healthy boy, and the mother recovered to my wish.



I have given a particular detail of this case, in order to make young practitioners acquainted with the common method of acting in natural labours, these being the circumstances that usually occur to an healthy woman in bearing her first child. Some slight pains recurring now and then for some days before the real labour, are of advantage, in slowly and insensibly dilating the os uteri; so that when the pains grow stronger, the delivery is the sooner effected. The os internum is very different in different women, with regard to the thickness and rigidity; and, in proportion to these, requires more or less time for the dilatation. In forty-nine cases out of fifty, the membranes break after the os internum is fully opened, so as that they are protruded into the middle or lower part of the vagina. After these are broken, the pains frequently abate for a shorter or longer time, and then growing stronger, the child's head is forced lower down, and the forehead turns gradually from the ischium into the hollow of the sacrum. Time should now be given for the vertex to open the os externum, and this is most safely effected by slow gradual pains; for there is seldom occasion to lubricate or use other means for stretching the parts. Indeed, in natural labours, almost our whole business consists in encouraging the patient, and preventing the fourchette, or frænum labiorum, from being torn, when the head is protruded through the os externum. For although it is commonly said, that such a woman was laid by such a person, the delivery is generally performed by the labour-pains; and if we wait with patience, nature of herself will do the work. We ought not, therefore, to fatigue the patient by putting her too soon in labour, according to the common phrase, but to attend carefully to the operation of the pains; and in most cases we shall have nothing else to do but receive the child.

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### C A S E II.

**I** DELIVERED a woman in the beginning of the seventh month, of her third child. Her husband had died suddenly about twenty days before, and upon that occasion she had felt the child move with great violence, and this was succeeded by a kind of tremulous motion; after which she never felt it stir. On the nineteenth day after this accident, she was taken with a looseness, which brought on labour-pains; the membranes broke when the mouth of the womb was fully opened, and she was immediately delivered of a dead child, which passed easily along, though its abdomen was much swelled,

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### N U M B. II. C A S E I.

OF THE OS EXTERNUM OPENED BY THE MEMBRANES.

**B**EING called to one of the poor women whom my pupils attended, and examining in time of a pain, I found the waters had pushed the membranes through the os externum, in a large, round, globular figure. When the pain abated, and the membranes became lax, I could easily with my finger feel the child's head at the lower part of the vagina. I desired her to lie down with her breech to the bed-side, and be covered with a quilt. The pains, which were strong, returning at short intervals, forced the membranes and waters with the child's head through the os externum; even the shoulders, and part of the body, were delivered before the breaking of the membranes, which then gave way, tearing all round from the edge of the placenta, and remaining upon the head and body of the child, which

could not breathe till I had stripped them off. The woman had bore children before this labour; the pelvis was large, the child come to his full time, and of an ordinary size; but the placenta came off with difficulty. I understood she had not undergone above six pains when I arrived; and before the pupils could have notice to come she was delivered. She expressed great joy when she knew the child was born with a cawl, which she dried and carefully kept, in full persuasion that her child would never suffer extremity, either by sea or land, while it remained in her possession.

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*C A S E II.*

**B**EING called to another poor woman, whom I delivered by myself, the membranes, waters, and head, were protruded through the os externum, while the patient stood leaning on the back of a chair: then the membranes breaking, were torn all round before the shoulders were delivered, and remained sticking on the head: the same pain brought forth the body and the placenta; and I arrived just in time to prevent the child falling on the ground.

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*C A S E III.*

**I** ATTENDED a person who fell in labour in the latter end of the eighth month: she had formerly had quick labours, and now the pains were strong and frequent. The membranes and waters had opened the os externum, and the head of the child was low down, though it did not advance in proportion to the protrusion of the membranes, which at last were forced down about the size of a child's head, without the os externum. While the head was retarded in this situation, the weight of the waters stretched down the membranes, and formed the appearance of a large bag, narrow at the upper part, which I pulled away, and threw into a basin. In three pains more, she was delivered of a child, which had been dead eight or ten days, with a swelled abdomen, which had retarded the birth.

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*C A S E IV.*

**B**EING called, in a great hurry, to a gentlewoman in labour of her first child, in the beginning of the seventh month, I found that the membranes, with the placenta, waters, and child, had been delivered all together, and put in a basin by the nurse; so that the membranes were whole, and the child swimming in a great quantity of water. Without remembering to search for the allantois, I opened them in a hurry, and perceived that the child had been dead ten or fourteen days.

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*C A S E V.*

**M**Y assistance was demanded for another patient, come to the full time in her first child: the labour was slow; but, by degrees the waters and membranes opened the os internum and externum without breaking, and the woman was delivered of a dead child, whose belly was swelled,

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*C A S E VI.*

**I** DELIVERED a woman in the eighth month, whose os externum was opened by the membranes and waters, which were pushed out a great way: the child's head was likewise partly protruded, but yielded a very uncommon

uncommon feeling to the touch, as if there had been another set of membranes and waters, within which I thought I felt the loose bones of the skull. When I broke the membranes, I felt the hairy scalp, and discovered an hydrocephalus in the child; which was soon delivered, and lived some days, though, from its continual moaning, it seemed to be in great agony. *Vide* collection xliii. No. 13.

Besides these, I have assisted in a great number of cases, where the membranes have opened the os externum, and the head has been delivered before they broke. Indeed, in all natural labours, I wait for this operation, which renders the passage for the child much more easy; and I never tell the good woman whether or not the membrane remains upon the child's head, that they may not have an opportunity of indulging an idle superstition.

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### N U M B. III. C A S E I.

*Of the os internum opened by the child's head and membranes. Also of the os externum opened in the same manner. Vide tab. xiii.*

**B**EING called to a woman in labour of her second child, I felt the mouth of the womb largely open, and the midwife said that the membranes were broken. This declaration had alarmed the woman, who entertained an idle notion, that if she was not immediately delivered, she would lose her opportunity; and indeed this apprehension was the cause of my being employed. After she had undergone two or three pains, I found that the head had gradually increased the dilatation of the os internum; that the membranes were not yet broke, and that the midwife had certainly mistaken a small discharge of urine for the waters. I then assured the patient that she was in no danger; and that, even though the membranes had been broken, the delivery ought to be left to the labour-pains: in consequence of which, the head was soon forced down into the middle of the pelvis; and the os uteri being fully dilated, I felt the membranes very smooth. Another pain forced the head down to the lower part of the pelvis, when the membranes splitting upon the head, I could plainly distinguish the hair of the scalp; and the patient was, in a little time, safely delivered by the midwife. I could feel no waters during labour, and there was only a small quantity discharged when the body was delivered.

Both before and since this occasion, I have been concerned in many cases of the same nature, which generally prove easy and successful, and happen when the child is surrounded by a small quantity of water. I have been sometimes puzzled to know whether or not the membranes were broken, until the head came so low down, that I could easily introduce the fore and middle fingers, and feel the hairy scalp. However, this uncertainty is of no consequence in such easy labours. At other times, I could feel no waters, until the head descended low down, and then I have perceived them protruding the membranes at the back part of the pelvis. *Vide* tab. xiv. and xv.

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### C A S E II.

**I** ATTENDED at a labour in which the child's head came down in the same manner as that described in the preceding case: the child was small, and came easily along; but I could feel no waters, nor did the membranes give way until the head was delivered. In other cases where there was little or no water, the membranes generally broke sooner.

N U M B.



## NUMB. IV. CASE I.

## OF A SMALL CHILD OR LARGE PELVIS.

**B**EING called to a gentlewoman, who had bespoke my attendance in consequence of her having been formerly subject to lingering labours, from the large size of the child and the smallness of the pelvis, found, before I could reach the place, she was delivered; and this uncommon facility proceeded from the very small size of the child, which was born four or five weeks before the end of her reckoning.

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C A S E II.

**M**Y attendance was bespoke for a woman in her first labour, by her friends, who were afraid it would be difficult, because she was pretty much distorted, had been sickly during pregnancy, and took but very little nourishment. For two or three days she had been subject to slight pains, but when they became stronger, I was suddenly called; and when I reached her house, found the child coming into the world. It was very small, the pelvis of a middling size, and the os uteri was pushed down without the os externum. The suddenness of the delivery occasioned an inflammation of the mouth of the womb, which abated in consequence of her drinking plentifully of diluting liquors: yet, after the ninth day, she complained of great pain in that part when she sat up, but was tolerably easy while she lay in the bed. For this reason, I prescribed a longer term of confinement than is usual, and directed a sponge dipped in warm claret to be put up in the vagina, and this application to be repeated several times in a day: by these means the complaint vanished by the end of the month.

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C A S E III.

**A**BOUT six or seven years ago, I was called to a patient on the thirteenth day after delivery, who laboured under the same complaint which I have described in the preceding case, and which was likewise the consequence of sudden delivery. The pelvis was large, and the os uteri being swelled and painful to the touch, I ordered her to be confined to her bed. The family physician being consulted, it was agreed that she should drink plentifully of weak caudle, chicken-broth, and, for a change, barley-water, in order to promote a diaphoresis; and that equal parts of the emollient decoction and French claret should be applied in the vagina, with a fine linen rag. For many days the pain always returned when she rose from bed, till one night, being told the child was very ill, she ran up to the nursery in a hurry, and this motion entirely carried off the complaint.

I have been concerned in many cases where the woman suffered, though not to such a degree, when the labour was precipitate, the child small, or the pelvis large.

Many women have bespoke my attendance, and, notwithstanding all my expedition, have been delivered before I could reach the place. One woman in particular bore five children so suddenly, that although I lived in her neighbourhood, and happened always to be at home, I never could arrive time enough to assist her, except in her first child.

## COLLECTION XV.

*Of lingering or tedious labours.*

## NUMB. I. CASE I.

FROM THE RIGIDITY OF THE MEMBRANES WHEN PUSHED DOWN WITH THE WATERS.

**A**BOUT seven in the evening I was called to a patient whose pains were pretty strong. The mouth of the womb was largely open, the head presented at the upper part of the pelvis, and, as usual, rested against the superior part of the os pubis; and during every pain, a small quantity of the waters pushed down the membranes at the back part of the pelvis. I waited to see if the child's head would advance, and though the os internum was fully open, would not venture to break the membranes; because, when I attended her at the birth of her first child, the preceding year, the labour was lingering and tedious, from the large size of the head, even though it had advanced farther, and the membranes were broke. I therefore was loth to break them until the head should come lower down; and she continued without any sleep or rest, subject to pretty severe pains at the interval of five or six minutes, till about seven in the morning, when, in spite of all my care to prevent her being fatigued, and the encouragement of the family physician, who was present, her spirits began to flag; she exclaimed she should die before delivery; and the friends seemed to be anxious and uneasy about her situation. During all this time the head had not advanced in the least, nor were the membranes with the waters farther pushed down. I introduced my finger into the vagina, and, after two or three unsuccessful attempts, burst them during a strong pain, by which means a large quantity of waters was discharged, and the head forced down to the middle of the pelvis. This being effected, she was soon delivered of a fine child, though smaller than the former.

## CASE II.

**A**BOUT three in the morning I was called, by a midwife, to a woman in labour of her first child. I understood that the pains had been strong and frequent, and that the friends being uneasy, recourse was had to my advice and assistance. I examined during a pain, and found the mouth of the womb open to about the breadth of a crown-piece, though the os uteri was pretty thick and rigid. She had been fatigued by walking, and undergoing her pains standing, and in various other positions, had enjoyed little or no rest for two nights, and was very costive. I prescribed an emollient and laxative clyster; after the operation of which, I again examined during a pain; found the os internum much in the same condition, the membranes being strongly pushed down with the waters. When, upon the pains abating, the membranes became lax, I felt the child's head, which being touched by the finger, swam up and returned: a circumstance that plainly proved there was a great quantity of waters. I assured the patient and her friends, that the child presented fair, and that there was no apparent danger; then I advised the midwife to put her to bed, without exposing her to any farther fatigue, or desiring her to force down, except when compelled by the pains; and in case she should not otherwise enjoy some rest, I prescribed the following draught:—℞ Aq. alexit. simp. ℥iv. Tinct. thebaic. gt. xv. Syr. emeconio. ℥ij. m. and directed her to drink frequently

frequently of weak warm caudle, to promote a diaphoresis. Next evening I received another call, when the midwife gave me to understand that she had taken the draught, in consequence of which, she had enjoyed refreshing rest, and a plentiful sweat, although she had been frequently waked by the pains; and she told me that the membranes were not yet broken, although the mouth of the womb had been fully opened for four hours. When I examined, I found the membranes pushed down with a large quantity of waters to the lower part of the vagina; and when the pain abated, felt the head pretty low. It still moved easily up and down; whence I concluded, that either it was small, or the pelvis not narrow; yet, as this was her first labour, I waited two hours, in hopes that the membranes would advance farther, and open the os externum; but they remaining in the same situation, I imagined their rigidity retarded the delivery; and breaking them in this persuasion, the child was soon delivered.

### C A S E III.

**B**EING called, by a midwife, to a woman who had been four-and-twenty hours in labour of her first child, I found the mouth of the womb largely open, the waters pushing down the membranes in a large globular figure; and as the violence of the pain abated, I felt the head of the child resting at the upper part of the os pubis. The midwife told me the patient had been in that condition several hours, but that she was afraid of breaking the membranes too soon, because she suspected that the woman was a little distorted, and the pelvis narrow: however, the friends being concerned at her being so long in labour, and a discharge of blood supervening, she had thought it necessary to ask advice. After having twice again examined during pains, and maturely considering the case, I concluded that delivery was retarded by the rigidity of the membranes, which seemed to be thicker than usual; for as the child's head swam up from the touch, and returned, it was plain that it could not be engaged, and that there was a great quantity of the waters. Though she had not to all appearance lost above twelve ounces of blood, yet, as the discharge seemed to increase, I broke the membranes the next pain: a large quantity of waters was discharged, and the child's head was forced more backward, toward the upper part of the pelvis. I likewise felt the os internum loose and soft; and as it was no longer kept on the stretch by the membranes and waters, she became perfectly easy, had no pains for a long time, and the flooding entirely ceased. Before the membranes were broken, she had felt a strong propensity to sleep, which the pains prevented; but now I ordered her to be undressed, put in her naked bed, and kept quiet, that, if possible, she might enjoy some natural repose. She accordingly rested, and was refreshed. As for the blood she had lost, she was rather benefited than injured by the discharge; for she had for some weeks complained of a drowsiness, fulness in her eyes, with pains and giddiness in the head, which were now removed, inasmuch, that she declared herself much more light and easy. I desired the midwife to indulge her in her repose, and when the pains should return, to let the labour proceed in a slow and easy manner, allowing time for the head to stretch the vagina and external parts; and I told her, that the patient being strong and healthy, nothing else was necessary but that she should frequently drink weak caudle, broth, or barley-water, to encourage and support a plentiful perspiration. I was afterwards informed, that she slept several hours, and upon the return of the pains, was safely delivered by the midwife.



## C A S E IV.

I ATTENDED a gentlewoman, though not in labour of her first child, who suffered all the complaints described in the preceding case, except the flooding. By my advice, she lost eight ounces of blood, and was immediately relieved: but the labour being retarded by the rigidity of the membranes, though the child's head was pretty far advanced in the pelvis, they were broken; and in two or three pains after, the woman was delivered.

## N U M B. II. C A S E I.

FROM THE RIGIDITY OF THE MEMBRANES WHEN NOT PROTRUDED BY THE WATERS.

ABOUT four o'clock one morning, I was called by a midwife to a woman whom she had formerly delivered with ease; but now she had been in strong labour for many hours. She said, the waters had been draining off for the space of three hours, and she had every pain expected the delivery, which she supposed was retarded by the child being large and dead. I found the child's head about two-thirds down in the pelvis, and during every pain perceived the discharge of a very little water, which I at first mistook for those of the uterus. But, upon the cessation of a pain, raising the head a little with my finger, I observed a large quantity was discharged from the bladder; and when I felt for the hair of the scalp, I found the membranes smooth and unbroken. I again raised the head, that the patient might discharge more urine, and then the membranes split. By the next pain, the head was forced down to the os externum, and in a very little time the child was delivered.

## C A S E II.

NEAR the same time I attended a woman in labour of her first child, and could feel no waters, though the head and membranes had gradually opened the mouth of the womb, and were forced down to the middle of the pelvis; where, however, they remained near two hours. As I could insinuate my finger all round the under part of the child's head, felt the ear at the os pubis, and distinguished the sutures, I concluded that the head was not large, nor the pelvis narrow; but that this delay must proceed from the rigidity of the membranes. These, therefore, during a pain, I endeavoured to wear thin, by rubbing them with the edge of my nail, which was smooth and short: accordingly, in time of the next pain, they split upon the head, which was immediately forced down to the os externum; and this being gradually dilated, the child was delivered.

I have been concerned in many cases of the same kind, where labour was retarded by the rigidity of the membranes; but as I have frequently known tedious and lingering cases proceed from too much precipitation in breaking the membranes, I choose rather to err a little on the other extreme, provided the patient is in no danger from weakness or flooding.

## N U M B. III. C A S E I.

FROM THE MEMBRANES BREAKING TOO SOON.

MY attendance was bespoke to a patient who was very fat and unweildy. She had been taken with very slight pains, and the membranes breaking, a great quantity of waters was discharged; upon which, being called in a great hurry, I found the mouth of the womb open to about the breadth of a sixpence, and thin though rigid. She had been, five years be-

fore, delivered of a child which followed immediately after the rupture of the membranes, and she now expected the same expeditious delivery. I told her that there was a great difference between that labour, occasioned by the long interval, by her present corpulency, and the precipitate discharge of the waters, which might render the case more tedious; though, as the pains were trifling, and the child presented fair, I encouraged her to exert her patience, to banish all anxious thoughts, and avoid all manner of fatigue; and as she was costive, I prescribed a clyster, which had the desired effect. After this period, she continued three days and three nights in a lingering kind of labour, before the mouth of the womb was sufficiently dilated; so that I was obliged to give her an opiate every evening, and direct her to reserve her strength by lying mostly in bed. The os internum being fully opened, the pains grew stronger, and she was soon delivered of a very small child.

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### C A S E II.

I WAS called to a poor woman who had been two days in labour of her third child, and found the os uteri open to about the breadth of a shilling, the lips being thick but short; the membranes were broken, the child's head rested at the upper part of the pelvis, and the patient laboured under a looseness, which probably had brought on some slight pains. She had been attended by a person of no education or practice in midwifery; who finding the membranes broken, imagined it was his business to promote the delivery with all possible expedition; and with that view, fatigued the patient excessively, by ordering her to walk about and bear down with all her force at every inconsiderable pain.

The woman being quite exhausted, I directed her to be put to bed and kept quiet, and leaving a gentleman and midwife, who at that time were my pupils, I desired them to give her five grains of the *pilula japonacæ*, and repeat the dose once or twice, if there should be occasion. By these means she was freed of pain, procured rest, and recovered her exhausted spirits. She continued easy for two days, except in time of slight pains, which every now and then recurred, and during which, a small quantity of the waters continued to be discharged: but on the third night, the pains increased, the os uteri became softer, and was more and more dilated by the child's head, which advancing, plugged up the parts, so as that the dribbling of the waters ceased; and in a very little time the woman was safely delivered.

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### C A S E III.

SOON after this occasion, I was called to a labour by a gentleman of very little experience in the practice of midwifery, who, taking me aside, told me he was just going to deliver a woman whom he had attended a night and a day, and that, as his character was not established, he thought it advisable to have a person of the profession present. Indeed I was struck with his apparatus, which was very extraordinary, for his arms were rolled up with napkins, and a sheet was pinned round his middle as high as his breast. His intention was to turn the child and deliver footling; and he desired me to examine the woman, that I might satisfy the friends of the necessity he was under to take this step immediately, for the preservation of the mother and the fruit of her womb. I felt the os internum open to the breadth of a crown-piece, and the head presenting; and after having fully informed myself

myself of every circumstance necessary to be known, I concluded that the labour had been rendered tedious from the premature rupture of the membranes. I then gave the gentleman a friendly advice in private; in consequence of which he laid aside his working dress; and as the woman, who was strong, had enjoyed no rest the preceding night, an opiate was administered. She slept several hours, and was refreshed, and toward morning, the pains returning, delivered the child and secundines. I have assisted in a number of such cases, where, by a cautious management, the parts were gradually opened, and the woman safely delivered. In many women, I have known the membranes broken several days, weeks, and even months, before labour; and, provided they were not much weakened, they have been delivered with ease. In my practice, this case has chiefly prevailed among fat women, and may perhaps be owing to laxity.

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#### C A S E IV.

*Communicated by Dr. Urban, of Richmond, in Surrey.*

HE was called to a woman in labour, near Norwich. The waters had been drained off for two days, during which she had enjoyed no rest. She was very weak and low-spirited, had violent retchings, with a singultus; and when he examined, he found the child's head presenting. He directed her to be put to bed; prescribed an anodyne draught, in consequence of which she had a refreshing sleep of two or three hours; then the pains, which were weak before, grew strong and more frequent, and the woman was safely brought to bed.

He says, he could have delivered with the forceps; but followed my advice, which was never to use them but when they were absolutely necessary. The same method he has successfully used upon several occasions.

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#### C A S E V.

I WAS called to a patient in labour of her first child. The membranes broke in the evening, and she had frequent pains all night; but would not allow me to examine till about eight o'clock next morning, when I found the child's head resting above the pubes, and the os uteri soft and lying loose, as if it had been pretty largely opened before the membranes broke: but the vagina was very straight, as well as the os externum. She enjoyed no rest all night, the pains grew excessively strong and frequent, and the child's head had not advanced in the least. Being apprehensive from her violent complaints of the abdomen, that the uterus would burst by such strong efforts, I prescribed a paretoric draught to allay the violence of the pain and procure sleep. As she had been used to take opiates, the dose amounted to thirty drops of the tinct. thebaic. with *zij. syr. meconio*, and some simple cinnamon-water. This prescription had the desired effect; she slept several hours, though every now and then her sleep was interrupted by a strong pain. About twelve that night, when the effect of the opiate was wore off, her violent pains recurring, I was allowed to examine again; and finding the head still in the same situation, the draught was repeated. This kept her tolerably easy till eight in the morning, when the pains returning, it was again administered: for the same reason it was repeated at six in the evening, and four in the morning. About eight I was permitted to examine the third time, when I felt the head pitched down in a lengthened form to the middle of the pelvis: but the lower part of the vagina was



still very narrow, as well as the os externum, and time was required for dilating both, and for pushing down and elongating the head, which was large. At the beginning of labour she had some loose stools, but made no water for three nights and two days; so that when the effect of the opiate ceased, the distention of the bladder aggravated the agony of her sufferings, yet no persuasions would induce her to let me draw off the urine, and I was again obliged to repeat the opiate. Her strong pains, which every now and then recurred, she endeavoured to suppress, lest I should desire to examine, and would allow nobody to be with her but the nurse. At length I was, in the evening, suddenly called from another apartment, and finding the head almost delivered, I had just time to prevent the laceration of the external parts. I felt a languid motion in the vessels of the funis; but could not, by all the usual methods, bring the child to breathe. I brought away the placenta, found the uterus in a right state, and immediately drew off a large quantity of urine with the catheter. Nevertheless, I was obliged to repeat the draught four or five times in four-and-twenty hours, because she could neither rest nor eat without it; her pulse flagged, and her spirits sunk, and no other cordials had the least effect. After delivery, her urine was obstructed for three days, and for eight weeks afterwards she lost the power of retention, which however returned with her strength. As for the child, it was probably lost by her timorous disposition, in consequence of which she refused all assistance at the latter end of labour.

## COLLECTION XVI.

### *Of lingering and tedious labours.*

#### N U M B. I. C A S E I.

FROM THE FOREHEAD BEING PREVENTED FROM TURNING BACKWARD INTO THE LOWER CONCAVE PART OF THE SACRUM.

[Vide Tab. xiii. and Sect. iii. No. iii.]

I WAS called to a woman who had been long in labour of her first child, and was naturally of a weak and delicate constitution. On that account, the midwife told me she had kept her mostly in bed, and done nothing to fatigue her. She said the labour had gone on very well, though the pains were slight and at long intervals; and that since the discharge of the waters, the child's head had advanced slowly to the external parts, where it had stopped for a considerable time. This account I found true upon examination. A clyster had been administered with good effect, and the patient had enjoyed a good deal of sleep between the pains: but finding her pulse rather too weak and languid, I directed her to take two spoonfuls of the following mixture every half hour:—*Rx* Aq. cinnam. ten. ʒiv ss. Spirituos. fal. vol. c. c. ℥ss. Conf. cardiac. ʒj. Syr. simp. ʒss. m. I attended some time without perceiving that the head advanced to open the os externum. I felt one of the ears at the os pubis, the lambdoidal crossing the end of the sagittal suture at the lower part of the right os ischium, and the fontanel on the opposite side at the upper part of the left. I perceived that the pains had not force enough to move the occiput from the right ischium

chium, so as to pass under the os pubis, and the forehead from the opposite side to the hollow of the os sacrum; I therefore, during the next pain, introduced my fingers towards the child's left temple, and turned the forehead backward to the os sacrum. The narrow part of the head being now toward the sides and lower part of the pelvis, the vertex immediately advanced forward, gradually opening the os externum during every pain; and the woman being safely delivered, the placenta separated slowly, and was discharged in about half an hour.

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### C A S E II.

**B**EING called to a woman in labour of her first child, I found a midwife and a male practitioner in waiting. This last gave me to understand, that when he came, the patient had been a long time in strong labour; that after the mouth of the womb was sufficiently opened, the membranes had broken, and the pains gone off for some time, though they returned with greater violence, and forced down the head to the lower part of the pelvis, beyond which situation it had not advanced in a whole hour: that he had attempted to deliver it with a lack or fillet, which he had procured as a great secret; but the head being large, he could not fix it properly, neither could he, after repeated trials, bring the child by the feet: so that he concluded there was an absolute necessity for opening the head. Upon examination, I found the head in the same position as that described in the preceding case, or rather higher in the pelvis. The pains were tolerably strong, the woman's pulse was much more quick than is usual, even in time of pains. She complained of a violent head-ach, laboured under great drought, and her skin was very hot and dry. Of these complaints, however, she was relieved by losing ten ounces of blood from her arm. I told the gentleman, that as the patient was strong, and the pains continued, we ought to wait the efforts of nature, without using either forceps or fillet, which I never applied, except to assist nature when she was too weak. When I examined again, I found the head lower down, and moved the forehead backward toward the os sacrum; so that the crown of the head advancing, opened the os externum, and the patient was soon delivered of a child of an extraordinary size. But the fillet having galled and torn part of the hairy scalp from the occiput, was the occasion of a violent inflammation, of which the child died in a few days. The mother, however, recovered tolerably well; and since that time has had pretty easy labours.

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### C A S E III.

**A** MIDWIFE sent for me to a very fat woman, near the age of forty, in labour of her first child. The membranes had been long broken before I came; and I understood that the friends, being uneasy, had sent for a gentleman of the profession, who, in attempting to deliver the patient, said he had broke his instrument, and went home in order to fetch another; but instead of returning, he sent a message, importing, that he was obliged to go and attend another woman. Her pains being strong, the os externum and lower part of the vagina were gently dilated; and the forehead being moved backward at the same time, the head advanced, and the woman was delivered in about half an hour after I arrived.

There was a very small opening through one of the parietal bones of the child's skull; yet none of the cerebrum was evacuated, though a great deal of blood was discharged, notwithstanding the application of proper compresses; and the poor child died moaning in five or six hours after its birth.

## C A S E IV.

**I**N the course of the same year, I was called by a gentleman who had formerly attended me for a short time, in behalf of a woman whom he had attempted to deliver with the forceps. He said, he was sure they had been properly applied; that he had pulled with great force, without being able to move the child's head; and that the woman was in such imminent danger, he did not believe she could live until we should reach the house. Notwithstanding this declaration, I found her pulse strong and good, as well as the pains; and that not above one-third part of the head had come down into the pelvis. I likewise understood she was used to have tedious labours, proceeding, in all probability, from the small size of the pelvis. I privately convinced the gentleman of his error; observing, that as the pains were good, no force ought to be applied; that the forceps would never succeed, except when the head was come lower down; and even then ought not to be used, unless the woman was in danger from weakness and want of labour-pains. We prescribed a mixture, to amuse the patient; and in about five hours she was safely delivered.

## N U M B. II. C A S E I.

*Of the vertex presenting, though low in the pelvis, the forehead being toward the os pubis.—Vide tab. xx. xxi.*

**A** MIDWIFE sent for me to a woman whom she had attended near two days, and whose former labours had been very easy; from which circumstance she inferred, that the child was of an extraordinary size. I found the fontanel toward the left groin, and the lambdoidal crossing the sagittal suture at the right side of the os coccygis. The os externum I gently opened during every pain, raising the head a little when the pain began to abate, and moving the forehead to the left side of the os sacrum. As the next pain increased I withdrew my hand, which was followed by the child's head, and the woman was in a little time delivered.

## C A S E II.

**I** ATTENDED a gentlewoman who had been easy in her former labours. When I was called the membranes were broken, and the mouth of the womb was largely open, though the head advanced very slowly. At length, feeling the vertex at the lower part of the coccyx, and the fontanel below the pubes, I attempted, but to no purpose, to raise the head, and move the forehead to the right side of the pelvis: yet, when I withdrew my hand, the head was forced lower down by a strong pain; the vertex protruded the perinæum and posterior parts, in form of a large tumour; the forehead, face, and chin, turned immediately out from below the pubes; and the vertex was raised upward, with an half-round turn, from the perinæum and posterior parts. The child was small, and cried as soon as the head was delivered, even before the body was extracted.

## N U M B. III.

## FROM THE PRESENTATION OF THE FONTANEL.

**I** HAVE often been concerned in cases where I found the fontanel presenting; they commonly proved tedious and lingering, though the delivery was generally effected by the labour-pains, and the child's head sometimes



sometimes appeared in form of a sow's back, a circumstance, in all probability, owing to the pressure it sustained in the pelvis, while it advanced in that unusual way. Sometimes, in these lingering labours, I have, by raising up the forehead with my fingers, altered the position, so as to let the vertex sink lower down, particularly in the following instance:—

### C A S E I.

**I** ATTENDED a gentlewoman, whom I had formerly three times delivered, after she had easy labours. The os uteri was now fully open, and the membranes broke soon after I arrived; yet the head did not advance as usual, but rested at the upper part of the pelvis. As she had been long fatigued with severe and fruitless pains, I examined the position of the head more narrowly, and plainly perceived the fontanel presenting in the middle; but I could not certainly discover how the forehead lay, until I had gradually opened the os externum during the pains. I then found that the vertex was to the left side, and the forehead, with the face, to the opposite part. As she lay in bed, upon her left side, I could not so easily assist in that position; she was therefore turned on her back, her head and shoulders being raised a little with pillows, and her knees held up toward her belly, as she lay across the bed; for her pains were also stronger while she continued in this posture. In the beginning of a pain, I gently introduced my right hand into the vagina, and raised up the forehead and face; and the pain increasing, I withdrew my hand, and found the vertex sink down to the lower part of the left ischium. In a few pains the forehead turned backward, the hindhead came out below the pubis, the os externum was gradually opened, and the child safely delivered.

### N U M B. IV. C A S E I.

#### FROM THE PRESENTATION OF THE FOREHEAD.

[Vide Tab. xxii.]

**B**EING called to a woman in labour, by the friends, who were uneasy at the lingering case, and imagined the midwife kept her in hand, because she had been several times delivered by another midwife, and her labours were easy, I understood the os uteri was fully opened, and the membranes had been broken several hours; that the child presented fair, and the pains were strong; yet the head had advanced very little, though, since I had been sent for, the child had descended considerably lower in the pelvis. Upon examining in time of a pain, I really imagined the vertex presented, and thought I felt the fontanel to the side, as in other cases; but when the head advanced, in consequence of succeeding pains, and protruded the perinæum and posterior parts, I felt the eyes and nose on the contrary side, toward the lower part of the os ischium. In another pain or two, the os externum being sufficiently dilated, the face turned in below the os pubis, over which the chin turned upward; the fontanel, vertex, and hindhead were raised, and came out with a semicircular turn from the perinæum and parts below, and the body was delivered by the same pain.

The child was small and dead; its forehead was raised up in form of a sugar-loaf, the vertex being pressed flat, and the face and hairy scalp very much swelled.

The mother for several days after delivery, complained of great pain in her back and at the pubes, which seemed to proceed from an over-straining of the ligaments at the juncture of the bones; but by lying quiet, and drinking plentifully of warm and weak diluting fluids, she enjoyed profuse sweats, and soon was freed of these complaints.

## C A S E II.

**T**HE following year, I assisted in a similar case, where the head was high up, and had long rested at the brim of the pelvis. At first I thought it presented fair; but as it did not advance for several hours, notwithstanding the strong pains, and I was told that the patient had been delivered of her second and third child before the midwife could reach the house, I concluded that the head did not present in the common way, and introduced my hand slowly into the vagina, as she lay on her left side. Finding the forehead presenting with the face to the right ilium, I pushed it up to that side, and as I withdrew my hand a little, still pressed it up with my fingers, that it might not return before the next pain, which forced down the vertex from the opposite side; the head descended gradually, and the woman was delivered in a few pains.

## N U M B. V.

## FROM THE PRESENTATION OF THE EARS.

**I**HAVE known a few cases in which the ear presented; and when the child was not large, the pains commonly altered the position, by forcing down the vertex, and the patient was easily delivered. This was commonly the case, too, when the fontanel presented: but when the head was large, the labour was more tedious and lingering; upon which occasion I usually pushed up the head so as that the vertex might advance, particularly in the following instance:—

## C A S E I.

**B**EING called by a midwife to a woman who had been long in labour, I introduced my hand into the vagina, and finding the ear presenting, could perceive, when I raised the head, neck, and shoulder, to the back part of the uterus, that the upper part of the head lay over the pubes, the face being to the right side. As all the waters were discharged, it would have required great force to turn the child so as to bring it by the feet: I therefore raised the head higher, forcing the forehead upward, and the vertex coming in as I withdrew my hand, the child was presently delivered.

## N U M B. VI. C A S E I.

FROM THE PRESENTATION OF THE FACE, SHOULDER,  
AND BREAST.

[ Vide tab. xxiii. ]

**B**EING called to a woman who had been a great many hours in labour, after the mouth of the womb was fully opened, and the waters discharged, I found the head low down in the pelvis, the face presenting, the chin at the lower part of the pubes, and the cheeks so excessively swelled, that at first I imagined the breech presented; until examining a second time with my fingers, I felt the mouth, eyes, and nose. When the friends asked if the case was dangerous, I precipitately answered, that there was no great danger but that of losing the child, which might be saved if the mother was soon delivered. They replied, that provided the mother was safe, the child was of no great consequence, as she had already more children than she could well maintain. The patient told me, she felt the child stir every now and then; and indeed I felt its motion by laying my hand on her belly. However, as every body present declared against my giving any assistance, and were satisfied with my telling them the woman was in no immediate danger,

I left

I left her to the care of the midwife, who indeed had opposed my being called. I could easily have delivered her with the forceps, and ought to have said, in general, that there was danger in the case: I knew the child's head was small, and that the delivery was retarded either by the navel-string or the contraction of the lower part of the uterus round the neck; or before the shoulders; for the head was pulled up as the pains abated.

This visit I made in the afternoon; and the child was not delivered till the evening, when I was called again in a great hurry to bring away the placenta, which was easily extracted. I examined the child, which was dead, and found its head squeezed to a great length, the face and neck being much swelled, and of a livid colour.

## C A S E II.

**I** EXAMINED one of the poor women, attended by my pupils, in labour of her first child, which lay very high, and I thought I felt the breech presenting. The membranes had broken when the mouth of the womb was dilated to the breadth of half a crown. The pains being slight and the woman strong, I desired the gentleman to let the breech be pushed down gradually, and slowly dilate the os internum; and, in the mean time, I left a midwife to attend, and directed her to give us notice when that dilatation should be effected. In about three hours I was called again; and understood from the midwife, that after the mouth of the womb was fully opened, the child descended very fast, presenting at first with the cheek, but that now she plainly distinguished the face. When I examined, I found the chin down to the lower part of the left ischium, and turned up below the pubis. In a few pains, the os externum being sufficiently dilated, the forehead and vertex turned up from the perinæum, and the woman was immediately delivered of a small child, before any of the pupils arrived.

## C A S E III.

[Vide Tab. xxv.]

**S**OME years ago, I was called to a woman in labour, by a midwife, who told me she found the opening of the child's head below the share-bones, and imagined the child came wrong, with the forehead to that part. At first when I examined I was of the same opinion; but during the next pain, which was very strong, I found the head was pushed down much lower at the back part of the pelvis. Feeling at that part, with my finger, for the lambdoidal suture, I plainly distinguished the face, and the chin backward at the coccyx. In two pains more, the face and forehead protruded the posterior parts in form of a large tumour, the perinæum and fundament were greatly lengthened, the vertex and occiput slipped out from below the pubes; then the forehead and face turned up from the perinæum, which being thin, I supported it with my hand, and the woman was delivered of a small child. Her pelvis was large, and she used to have very quick labours.

## C A S E IV.

**I** ATTENDED a gentlewoman, whom I had twice before delivered, after tedious labours, proceeding from the largeness of the children and the small size of the pelvis. When I was called on this third occasion, the mouth of the womb was open to about the breadth of a crown-piece, the



membranes and waters were very tense during a pain, but being relaxed, when that abated, I felt some part of the child, though more unequal than the apex of the head. Having waited till by degrees the membranes had fully opened the parts, and were pushed down to the lower part of the vagina, I examined again, and felt the child's face presenting through the membranes. Reflecting upon her former tedious labours, and foreseeing that if I allowed the head to come along in that position, the patient would suffer, and that if I should bring it by the feet, the child might be lost, I directed her to be laid on her back, with her breech to the foot of the bed, and supported with pillows, between a sitting and a lying posture, on pretence that the labour would be favoured by such a situation. While a woman sat behind supporting her head, and one on each side held up her legs and knees, I gradually dilated the os externum during the pains, until I could introduce my hand into the vagina. In pushing it farther up, I felt the membranes break; but, my hand still advancing, the os externum was plugged up by the lower part of my arm, which hindered the waters from being discharged, until feeling the chin to the right, and the forehead to the left side, I raised this last upwards, grasping the vertex, which was now lowermost, with my fingers and thumb. I then gently withdrew my hand a little, to let the waters pass, that the uterus might be contracted, and keep the child in that position. Finding this expedient succeed, I drew forth my hand, when the patient thought the child was delivered. However, I convinced her that what I had done was absolutely necessary, and that she was now in a fair way of delivery, provided she would exert that courage and patience which had supported her in her former labours. Nor was I disappointed in my prognostic; for this delivery was much quicker than those she had experienced before.

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C A S E V.

**M**Y attendance was required to a woman in labour, by a midwife who had formerly attended my lectures; she informed me that the mouth of the womb was largely open; and although the membranes were not broken, she could find something like a hand and fingers: she likewise told me, that the woman was straight made; that she had delivered her once before, when the labour was very tedious, and the head of the child, which was dead-born, squeezed to a great length. I found every thing as she described, and felt besides something like the shoulder or hip, which I was certain could not be the head. As her former labours had been difficult, and I was afraid the child would be lost, should it be brought by the feet, I resolved to seize the opportunity of trying to bring in the head, since the membranes were not broken. I accordingly acted pretty much in the same manner as in the preceding case; but found greater difficulty in bringing in the head, which was more slippery and large than in the former instance; besides, I lost a great quantity of the waters, by being obliged, after I had pushed up the shoulder, to withdraw my hand a good way before I could bring in the head, and in attempting to raise up the hand that came down with it. The vertex being turned down, and one of the ears toward the vertebræ of the loins, I withdrew my hand, when the forehead with the right-hand was to the right, and the occiput to the left side of the pelvis, and the pains ceased for some time, as usual, after the membranes are broken. Having now encouraged the woman, by telling her that the child presented fair, I took my leave; and in about three hours she was safely delivered, though not without very strong and severe pains.

## C A S E VI.

SOON after, I was called to a woman whom I had before delivered of a child that presented wrong, though I could not save it by reason of her narrow pelvis. On this occasion, she had been subject to frequent though slight pains the day before I saw her; toward morning the membranes had broken, a small quantity of the waters was discharged, and she had no more pains till my arrival. Upon examining, I found some part presenting, which could neither be the head nor breech, and I afterwards discovered to be the breast. As the pains had ceased, I was in hopes that some of the waters were left in the uterus, although the membranes were broken; and going to work as in the two former cases, brought in the vertex, with great difficulty, occasioned by the slippiness of the body and head, which last was, after many efforts, and the return of strong pains, squeezed down in a longitudinal form, and the woman safely delivered.

In these cases we are seldom called in by the midwives before the membranes are broken, otherwise we should, in preternatural positions, have a better opportunity to bring in the vertex, when the pelvis is so small, or the head so large, that the child cannot be saved, if brought by the feet,

## C A S E VII.

*Communicated by Mr. Hargood, in a letter from Chatham.*

WHEN he was called, the midwife told him the waters had been discharged several hours; and he found the face presenting low in the pelvis, the chin being toward the right ischium. After she had undergone several pains, which did no service, he resolved to deliver with the forceps, but just when he was about to apply them, she was seized with a strong pain, during which he assisted with his fingers in moving the chin towards the pubes, and the child was safely delivered.

## C A S E VIII.

*Communicated by Mr. Cook,*

I WAS called to a woman in labour, and felt the child's face presenting. I understood she had undergone two tedious labours before, though the children were very small; whence I concluded her pelvis was narrow, and in passing my hand into the vagina, I found it so. Upon which I laid aside all thoughts of turning the child and delivering by the feet, as I should have done had the pelvis been large. The face being high up, and her pains very strong, I waited to see if they would bring it lower down; and in about six hours my expectation was answered, the chin being at the left ischium. I then, during the pains, endeavoured to raise it to the os pubis with my finger, and in that manner the child was delivered. The head was squeezed into a long form, the parietal bones were pressed one over another, and on one side of the head was a very deep impression formed by the jutting in of the os sacrum. The face was very much bruised and swelled, and the child dead. I prescribed an opiate for the woman, who had undergone great fatigue; she enjoyed good rest, and did well.

## COLLECTION XVII.

*Of tedious cases from the rigidity of the os internum, vagina, or os externum; as also from the wrong position of the mouth of the Womb.*

## NUMB. I. CASE I.

## OF THE RIGIDITY OF THE OS UTERI.

**I** WAS called to a woman turned of forty, in labour of her first child, who, though, by her own and midwife's account, she had three or four weeks to go, had been in a kind of lingering labour for two days. At six in the evening the membranes broke; and as she lived at a distance, I could not be with her till about four next morning; when the midwife told me, that after the membranes broke, she had every now and then a strong pain, but that the mouth of the womb was not open as usual to these pains, and she was afraid that the womb and all together would be pushed out of the body through the os externum. Upon examining in time of a pain, I found the mouth of the womb open to about the breadth of half-a-crown, but thick and rigid, and forced about half an inch without the os externum, which was pretty much dilated, and I felt the child's head presenting. There was an intense heat at the mouth of the uterus, and she complained of great pain in that part, even in absence of the labour-pains. She was of a strong and healthy constitution, though of a thin habit: her pulse was quick, full, and hard; her skin hot and dry: she laboured under a severe drought, and I understand she had from time to time swallowed cordials to assist the labour, such as white-wine and malt-spirits. Having considered the circumstance of the case, I concluded that the difficulty of delivery was owing to the rigidity of the os internum, for she had lain chiefly on the bed, without having been fatigued; that the head was but small, because it had pushed the mouth of the womb so low down, and that the fever was owing to an indiscreet use of spirituous liquors. In consequence of these reflections, she was bled at the arm to the quantity of twelve ounces, directed to drink plenty of barley-water, kept in bed, lying on one side, her breech being raised a little higher than her body, and during every pain I kept up the uterus and head with my fingers, so as to resist and abate the violent force of the pains. By these means she was greatly relieved; enjoyed between whiles gentle slumbers and plentiful sweats; the mouth of the womb turned more soft and yielding, and when largely dilated, I pushed it gently up with my fingers all round the head, which at last glided easily along, and was delivered. I took the same precaution in delivering the shoulders and body, desired the midwife to confine her to bed longer than the usual time, and advised her to abstain from any violent exercise for a considerable time after she should be able to walk, in order to prevent a prolapsus uteri.

## CASE II.

**I** ATTENDED a patient, near forty, in labour of her first child, who had been afflicted with a prolapsus uteri during her pregnancy. When I was called, she had some slight pains, the mouth of the womb was very little



little open, seemed thin and rigid, and was situated more forward in the vagina than is commonly the case; the child's head was pressed low down, and seemed small, but I could feel no waters. Her pulse being very quick, she was bled to the quantity of eight ounces; an emollient and laxative clyster being injected, discharged a great quantity of hard fæces; and as she had enjoyed no sleep that day or the preceding night, I prescribed an anodyne draught, and directed her to drink plentifully of barley-water. These expedients succeeded to my wish; she slept and sweated during the greatest part of the night, and I was called again in the morning, when the pains grew stronger and more frequent. I then found the mouth of the womb much more open, though pushed down without the os externum; I likewise felt between my fingers the hair of the child's head, though the patient was not sensible that the membranes were broken, or the waters drained off. During every pain, I kept up the child's head; and the mouth of the womb, which I gradually dilated with my finger, till being fully opened, it easily slipped up all round the head, and this afterward opening the os externum by degrees, was safely delivered.

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C A S E III.

SOON after, I was bespoke to attend a woman who had been subject to tedious labours. When called, I found the child's head pushed down to the anterior and inferior part of the uterus, so much at the fore part, that it was some time before I could feel the mouth of the womb, which was tilted backward and upward to the upper part of the os sacrum. In a few pains, the head pushed down the uterus below the pubes, to the os externum, when I felt the os uteri very thin and soft; and the patient complained of great pain from this protrusion of the lower part of the womb by the head. However, she was in a great measure relieved by my pressing against it with my fingers. At the same time, introducing the fore-finger of my other hand into the mouth of the womb, I brought it forward to the pubis, and kept it in that position during several pains, which gradually dilating it, the head was pushed lower and lower, and by degrees I shut up the mouth of the womb, betwixt the pubes and head, which afterward made very quick advances, and was soon delivered.

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C A S E IV.

A WOMAN I attended in labour of her first child, whose belly was pendulous, and hung forward over the pubes (*vide* tab. xii.) When I came she was pretty strait-laced, the pains were strong, the membranes pushed down with the waters, the os internum was backward, and high up, felt thick and rigid, and was opened to about the breadth of half-a-crown. I directed her to unlace, desired the nurse to make the bed so as that her breech might lie higher than her shoulder, and to raise up the belly with her hands in time of a pain. The mouth of the womb was gradually dilated, the membranes broken, and the child's head advanced lower in the pelvis; but the os internum remaining still backward, and the head pressing down the lower and anterior part of the uterus, I was obliged to assist, as in the former case, until the head was forced down, though it dilated with great difficulty, and to stretch the os externum, from time to time, before the child could be delivered.

## C A S E V.

**B**EING called to a patient not above fifteen years of age, in labour of her first child, I found the head of the child presenting, and that the membranes and waters, after having slowly dilated the os internum, advanced quite to the os externum, which I hoped they would open also; but they broke just as they arrived at the part. Then the head advanced, and pushed out the lower parts, in form of a large tumour, the perinæum being very thin, and stretched to the extent of five fingers. Nevertheless, the os externum was very little dilated, and the pains were so strong, that I was obliged to press the flat part of my hand upon the parts, to prevent the fourchette from being torn, and, by resisting the force of the head against the os externum, allow it time for gradual relaxation. The pains continuing to return every five or six minutes for the space of an hour, without any alteration, I found it necessary to prescribe an opiate to restrain them, that I might have time to lubricate with pomatum, and dilate gently with my fingers. By these means the os externum was gradually stretched so as to allow the head to pass without any laceration of the parts.

## C A S E VI.

**A**BOUT the same time I attended another patient, though not so young, and the labour proceeded much in the same manner; but after having guarded the parts, in order to prevent laceration during a few pains, I withdrew my hand to take some pomatum, for lubricating the external parts. In that interval a strong pain returned, contrary to my expectation; and, before I could replace my hand, the child's head was delivered, and the perinæum torn quite to the anus. This accident was owing to my hurry and precipitation, in consequence of which I passed my hand on the outside of the sheet, and before I could disengage it, the damage was done.

Ever since this misfortune, when I attend women in labour of their first children, I always turn up and pin the upper sheet to the bed-quilt, as the child's head advances to the lower part of the pelvis,

## C A S E VII.

*Communicated by Dr. Austin, of Edinburgh.*

**H**E was called to a young woman in labour of her first child, who had acute pains from Tuesday to Saturday night, when she was delivered. All that time the child's head was squeezed in the pelvis, and for twenty-four hours the bones rode one another in the vagina. About two hours before she was laid, he attempted to introduce the forceps, which, however, he declined using, because the pains became stronger, and he imagined the child was dead. Indeed, to all appearance it was still-born; but in a few minutes he was agreeably surprised to find it alive, and both the child and the mother did well. Two days after delivery, he extracted from the woman five English pints of urine with the catheter.

## COLLECTION XVIII.

*Of lingering or dangerous cases, from weakness, anxiety, frights, floodings, looseness, convulsions, fevers, &c.*

## NUMB. I. CASE I.

## FROM WEAKNESS.

**I** WAS called to one of the poor women whom my pupils attend, in labour of her first child. She was young, and so excessively weak, from want of nourishment, that when we were called she seemed really expiring. Another patient, who lived in the same house, said, this young woman was an entire stranger, who had been taken in as a lodger the preceding night, and seemed to be in a starving condition; and at last the poor creature herself owned, that she had received no sustenance but water for three days. She had been subject to some slight pains all the former day and night; when I examined, I found the mouth of the womb largely open, the membranes broken, and the head presenting; but the pains were at long intervals, and her weakness so alarming, that I immediately sent for a roll and some ale, which was qualified with a little sugar, nutmeg, and geneva; to which last I supposed she was accustomed, and therefore judged it was a better cordial than any other I could have prescribed from an apothecary's shop. Of this nourishment I directed her to take a very little at a time; and accordingly her exhausted spirits were gradually recruited, insomuch, that although the case was lingering and tedious, she was safely delivered by the labour-pains.

## CASE II.

**A** MIDWIFE called me to a woman of a weak habit and melancholy disposition, occasioned by the excessive flooding which had attended a former delivery. She had become pregnant again before she recovered her strength, was seldom able to rise out of bed, and her stomach was so weak, that it could receive or digest but very little nourishment. The midwife told me her pains were so weak she was afraid she could not be delivered without assistance; that she had enjoyed little or no sleep for the space of forty-eight hours, but had been subject to frequent faintings, from which she was with difficulty recovered; and, lastly, that the mouth of the womb was soft and a little open. I felt her pulse very low; and examining during a pain, which feebly protruded the membranes and waters, perceived the child's head: then bringing forward with my finger the os uteri towards the pubes, I found it much more open than the midwife imagined, and felt some indurated faeces in the rectum. I was also informed, that as she had an aversion to all sorts of nourishment, she eat very little, and seldom had passage in her belly, and was commonly costive.

I directed her to take frequently a tea-cup full of chicken-broth, and, between whiles, a little of the weak cinnamon-water. A clyster of the broth being thrown up, emptied the intestines; then half a pint of the same, in which two grains of opium were dissolved, being injected, I desired that she might be kept quiet in bed, in hope of procuring her sleep, and take an ounce of strong cinnamon-water every four hours. By these means the faintings went off; she slept pretty well that night between the pains; and these gradually increasing, she was safely delivered in the morning.

CASE



## C A S E III.

**A**T TENDING a gentlewoman in labour of her third child, who was of an hypochondriac disposition, went seldom abroad, and toward the latter end of pregnancy could hardly be kept out of bed, was, in the beginning of the eighth month, attacked with frequent retchings, so as to vomit up every thing she eat or drank; by which complaint she was reduced to a state of excessive weakness from want of nourishment.

I ordered the nurse to inject about half a pint of beef or mutton broth by way of clyster, five or six times a day; to prevail upon her to rise frequently and walk about the room, and likewise to go abroad sometimes in a coach.

By this method she recruited a little; and with the assistance of some mint and antihysterical water, she could keep a little broth in her stomach. I managed her much in the same manner as that described in the former case in time of labour, which, though tedious, ended happily.

## NUM B. II, CASE I. and II.

## FROM ANXIETY AND GRIEF.

**A**T TENDING a gentlewoman in labour of her first child, who, a few days before, had been so much affected with the sudden death of her husband, that she was seized with frequent faintings and great anxiety of mind, found, when I arrived, her pains were very weak, and the membranes had broken even before the mouth of the womb was much dilated. Although the child's head was small, she continued three days in a kind of labour; yet by encouraging and supporting her with cordials and nourishing things, and indulging her as much as possible with rest, she was safely delivered of a child; which seemed to have died soon after she heard the melancholy news of her husband's death.

Another gentlewoman sent for me in the same circumstances, overwhelmed with anxiety, in consequence of her husband's death, which had happened about two months before her labour. I found her so low, and the case was so tedious, that I was afraid she had not strength to undergo the delivery; yet by the management described above, she was safely delivered of a weakly child.

I have attended many other women in labour, whose lives were endangered by great weakness, proceeding from various causes; yet by such management they were safely delivered. Anxiety, misfortune, and disappointment, frequently reduce women in labour to the verge of death. Labour is often brought on by frights proceeding from different accidents; such as that of fire in the neighbourhood. The earthquake in the year 1749 produced several cases of this kind; and any thing that affects the passions to a degree of violence or transport, will have the same effect. On these occasions, if the child is small, delivery is sometimes performed on a sudden: but if the labour was begun before the patient was seized with the emotion, it commonly went off; nor did the pains return for a long time. However, if these frights, &c. are not attended with violent floodings, convulsions, or fevers, the patients generally recover, though sometimes the children are dead. Nay, even when those bad symptoms have accompanied the case, I have known both mother and child happily saved.

## NUMB. III. CASE I. and II.

## FROM FLOODINGS.

A WOMAN near her full time sent for me, who was seized with flooding and labour, in consequence of being frightened by a fire which happened in the house, as well as from the fatigue incurred by removing the furniture. When I arrived, the fire was extinguished, and I found her lying upon hay in a barn, losing blood very fast. The mouth of the womb being pretty largely opened, I immediately broke the membranes, which, with the waters, were pushed down in every pain, and the hæmorrhage soon stopped; the patient was very cold from the severity of the winter season, and the thinness of her covering. While I practised in the country, I always carried in my pocket some spirit of hartshorn, tincture of castor, and liquid laudanum, in separate bottles. Of these, with the assistance of some brandy and water, I composed a cordial and anodyne mixture, of which she took frequently two or three spoonfuls; and being accommodated with more clothes from the neighbourhood, she recovered her natural heat, and at last enjoyed a plentiful sweat, and refreshing repose. The pains were slowly augmented with long intervals; as her pulse and strength returned, the labour advanced; and although it was tedious, she was at last delivered. Yet her sleep was afterward interrupted by frightful dreams of fire, and she often awoke in a delirium; so that twenty days elapsed before she was out of danger. She had suckled her former children, but had no milk after this delivery, and but a very small discharge of the lochia, these evacuations being impeded by the disturbance of her thoughts. Her greatest danger, however, seeming to proceed from weakness, occasioned by the loss of so much blood. I thought the principal object of regard was the circulation, which was kept up by the cordials and restoratives; and as she was every now and then subject to shiverings, and laboured under a low weak pulse, I prescribed repeated doses of the bark, and the moderate use of French claret, from which she found great benefit.

When labour is brought on, and a flooding occasioned by such alarms, so that the patient is exhausted by the hæmorrhage, this is either diminished or entirely carried off by breaking the membranes; and of late I have frequently succeeded in floodings that happened before labour, by gently dilating the mouth of the womb with my finger, so as to bring on the labour-pains, as in the following case:—

I was called by a midwife to a woman seized with a flooding in the middle of the ninth month, though no visible cause could be assigned for this hæmorrhage, and she had bore children before with easy labours. As the discharge was not so great as to require immediate assistance, and her pulse was rather strong than otherwise, I ordered her to be bled to the quantity of eight ounces, and to be kept quiet in bed. Being costive, she received a clyster; took frequently two spoonfuls of a mixture composed of six ounces of the tincture of roses, and about twenty drops of liquid laudanum. The flooding abated, and she rested tolerably well that night; but when she rose to have her bed made, some large clots were discharged with a little pain, and the flooding returned, though it was soon restrained when she lay down again. In this condition she continued for several days, during which, upon the least motion, some clots, or coagula, were forced off from the vagina, and followed by a fresh discharge, which, notwithstanding all our efforts to encourage her, and support her strength, gradually weakened her constitution. It returning one evening with greater violence, I was called in a hurry, when I found her low and dispirited,

and her friends in great anxiety and consternation. I had previously informed the midwife and relations of the imminent danger that threatened the patient, if the flooding should not abate, or labour come on; and desired that some other gentleman of the profession might be consulted for their and my satisfaction; however, this proposal they declined. Thus left to my own discretion, and feeling the os uteri very soft, though very little open, I gently introduced the tip of my finger in order to dilate it, and desired the patient to assist my efforts by straining downward. This method being gradually repeated every now and then, the parts were opened to the breadth of half-a-crown, and I produced some slight pains that returned of themselves. Notwithstanding several attempts, I could not break the membranes, until gradually stretching the os externum during every pain, so as to introduce my hand into the vagina, I tried to advance my finger farther up; but not succeeding, I insinuated the female catheter, which breaking through the chorion and amnios, the waters were discharged in great quantity, the flooding immediately abated, and the child's head was pressed down upon the mouth of the womb. She now lay easy for a long time, without the return of a pain, during which interval she was nourished and supported by frequently receiving a little broth; but being afraid that there might be an internal flooding stopped up by the child's head, I desired her to force down, while I raised the head with my finger; and accordingly several coagula were discharged from the uterus. I then thought it advisable to bring on and encourage the pains, by stretching as before; and, to my wish, the parts were more and more dilated, the pains grew stronger, and at last the patient was safely delivered. During labour I frequently felt her pulse, which, instead of sinking, rather grew stronger:

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C A S E III.

A MIDWIFE sent for me, and told me that the patient had been seized with a violent flooding, but labour coming on, the membranes had broken, and the hæmorrhage was abated: she had sent for me, because she found the navel-string in the vagina, and the woman was very weak, and had little or no pains.

Indeed she was so low that I could scarcely feel her pulse; her lips were pale, and her extremities cold. I found the funis in the vagina, but could feel no pulsation: the child's head presented, but was kept forward to the os pubis by the lower part of the placenta, which lay along the sacrum; however, the flooding was entirely stopped.

I immediately directed her to take some of the solution of portable soup; and hot bricks wrapped in flannel being applied to her feet and hands, in about an hour her pulse grew stronger, her extremities recovered their natural warmth, and the pains returned. Finding the head was hindered from advancing by the placenta, I brought down this last, and the patient was gradually delivered of a small dead child; but she continued so weak, that for many weeks after her delivery, she was scarce able to walk about the room.

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C A S E IV.

THE friends of a gentlewoman, who had been seized with a flooding the preceding night, sent for me. The midwife told me, that the mouth of the womb was open to the breadth of a crown-piece; that the placenta



placenta presented; that the pains were very slight and at long intervals; and that the flooding was then more violent than when she was called. I myself felt the pulse was not so weak as one would have imagined, considering the quantity of blood she had lost.

In this patient, who had formerly bore children, the discharge began to appear in the beginning of the eighth month, returning every now and then when she ventured to go abroad; but, by the advice and assistance of another gentleman, who was now obliged to attend another patient, it had been kept within bounds till this period, which was the beginning of the ninth month.

As she would not permit me to examine, I privately advised the midwife to introduce her hand by degrees into the vagina, and feel all around for the edge of the placenta, at which part she might tear the membranes: she accordingly felt them at the left side; and a large quantity of waters being discharged, the child's head advanced, pressing the under part of the placenta to the right side. Then the pains increased, the head gradually dilated the os uteri, and being small, descended lower and lower, so that in a few pains the patient was delivered. The flooding abated when the waters were discharged, and was entirely stopped as soon as the head plugged up the os internum. From time to time I felt her pulse, which continued in much the same state, or rather turned stronger; from which circumstance, I concluded there was very little, if any, internal hæmorrhage; and her strength was kept up by her taking frequently a tea-cup full of broth, or wine and water.

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### C A S E V.

A MIDWIFE called me to a gentlewoman, whom she had formerly delivered of several children. This patient was taken with a small discharge of blood in the beginning of the ninth month, when I prescribed venæsection and a clyster; after the operation of which, she received a paregoric draught. But the discharge continuing for several days, though in a small degree, I examined and found the mouth of the womb very soft, placed so high, and so far backward, that I could not perceive the placenta presenting, though I felt through the vagina and uterus that the child's head rested against the os pubis. As the discharge did not weaken the patient, nothing was done; but I laid an injunction upon her, to refrain from going abroad. In about eight or nine days from this period, she was attacked with labour-pains, and the flooding increasing, I received another call, when I was informed by the midwife, that the mouth of the womb was largely open, that the waters had been discharged immediately before my arrival, that the placenta had come low down, but she could feel no part of the child. A strong pain immediately succeeding, I examined and found the placenta pushing through the os externum; and the delivery of this was immediately followed by that of the child, which was alive, although the placenta came first. The midwife told me, that when she found the placenta presenting, she was cautious of touching it with her fingers, remembering, that when she attended my lectures, I had observed, that the death of the child, in flooding cases, might be owing to its losing blood from the laceration of the cake.

## C A S E VI.

**B**EING called to a patient about the end of the eighth month of her second pregnancy, the midwife told me, that the waters had been discharged two hours before my arrival, and the flooding stopped; that feeling something like a fleshy substance come down, she had tried to pull it away, on the supposition that it was a false conception, and that these attempts were followed by a large quantity of blood. This substance, upon examination, I found to be the placenta low down at the os externum; and sliding my finger between it and the os pubis, I felt the child's head. During the next pain, she was delivered of the placenta, which was much lacerated, and a dead child. I have been concerned in many cases, where the flooding, when inconsiderable, was easily stopped, and the woman proceeded to the full time,

## C A S E VII.

*From Mr. F. W. at T. W.'s, with my answer.*

**S**OME time ago I was sent for to a woman after the midwife had made use of all her art to no effect. Upon enquiry, I found she had not gone her full time; the membranes were broken, and there had been, and still was, a profuse flooding. On touching, I could find no os tincæ. I then introduced my hand with some difficulty through the os externum, but could not readily meet with the os tincæ, being opposed by a soft fleshy substance, which I took for the placenta, and which proved to be so, as I afterwards found. The child lying so high, and being hindered by the placenta, I could not get my hand beyond the os internum to feel the child, which put me to a stand. However, having taken out my hand, I kept my countenance as well as I could, and advised the woman to be of good cheer. Now, from the great effusion of blood, together with the foregoing circumstances, I thought it absolutely necessary to attempt her delivery, by opening the contracted parts, and turning the child; but I had no sooner sat down before her, than providentially she had a strong pain or two; and, to my great surprise, the child was brought into the world (the placenta coming first) inclosed within its membranes. This plainly convinced me of the error of some who have asserted, that the placenta always adheres to the fundus uteri; seeing in this case it was the reverse. With regard to this case, the information I should be glad to receive is this:—Suppose the child had not been born as it was, whether I should have endeavoured to pass by the placenta, or extracted it before the child? And suppose part of the os tincæ is covered with part of the placenta, how to act?—*Vide collect. xxxiii. No. ii. case iii.*

*Answer to these queries,*

I had a case pretty near the same kind; the placenta adhered to the lower part of the uterus, and as the os uteri began to stretch, that part separated from the placenta, and then a small flooding began. When I was called, the patient had some labour-pains, and on examining I found the os internum open about the breadth of half-a-crown, and the placenta pressed a little down into it. As the discharge was not great and the woman strong, I delayed to deliver until the os internum should be more open. Some hours after this, I was again called: the flooding was pretty violent; I found the os internum fully opened, and the placenta fully presenting. I laid the woman on her back, with her thighs raised; then introduced

troduced my hand into the vagina, passed up by the placenta into the uterus, broke the membranes, and delivered the child by the feet, by which means I prevented the placenta from coming down first. The child was alive, because part of the placenta adhered to the lower side of the uterus. I have had cases where the placenta has come down into the vagina before the child's head, and was obliged to deliver it first, but in such cases the child was commonly dead. It appears in your case that the os internum had been fully open, that the placenta filled all the upper part of the pelvis, and that the child being small, and the placenta detached, they all slipped along with ease, and were so suddenly delivered.

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C A S E VIII.

I WAS called by Mr. Burnet to a woman in the latter end of the eighth month, who, the preceding night, had been taken with a large hæmorrhage of the uterus, and had, every now and then, some slight pains. Feeling the os uteri a little open, and the placenta presenting, I advised him to dilate gently through every pain; and as soon as he could reach the edge of the placenta, to break the membranes. This he effected in a few pains: the waters were no sooner discharged, than the flooding ceased, and the pains growing stronger, pushed down the child's head, which gradually dilated the os uteri. But as it passed, the detached part of the placenta was forced down with it, and actually tore from the rest fifteen or twenty minutes before the child was delivered. We now expected the child would be lost from this laceration; but, contrary to our expectation, it was alive, and did well; the mother also recovered, though she had lost a great deal of blood, and had fainting fits before I was called.

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C A S E IX.

*Communicated by Mr. J——, at F——.*

BEING called to a woman who had gone her full time, and had, for three or four days, been troubled with a flooding, which then increased, I immediately took ten ounces of blood from her arm, and prescribed an opiate that laid her quiet about three hours, during which the flooding abated. But when she awoke and began to stir, it returned, though not to so violent a degree. In the afternoon I was allowed to examine, and found the os internum very thin, dilated to the breadth of a sixpence: but as the flooding seemed to increase towards night, I ordered cloths, dipped in cold oxycerate, to be laid over the abdomen: this application being twice repeated, the flooding entirely ceased, labour-pains came on, in less than an hour she was delivered of a live female child, and both did well.

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N U M B. IV. C A S E I. and II.

FROM LOOSENESS.

SOME years since, bilious colics, attended with vomiting and looseness, being epidemical, I was called to several women labouring under these complaints at different times of pregnancy; and they were generally removed by washing the stomach and intestines with warm water, and afterwards prescribing opiates. One case, however, was more obstinate. I was called to a woman who had been exhausted and weakened by evacua-  
tions



tions for the space of twelve hours before my arrival. I was told by the midwife, that she was in labour of her first child, though she wanted about three weeks of the full time; but I was not allowed to examine, a circumstance at that time of little consequence, because whether she was or was not in labour, the first intention was to carry off the vomiting and looseness, and recruit her lost strength and spirits with all possible expedition. I immediately ordered her to swallow large draughts of mutton-broth, which I found ready made, mixed with warm water; and these being thrown up at several times with a little straining, she took thirty drops of liquid laudanum in a glass of brandy and water; but this being immediately rejected by her stomach, I gave her half the quantity of the laudanum in a little broth, and applied to her stomach a piece of brown paper, moistened with laudanum. She now began to be gradually relieved of the pain, vomiting, and looseness; so that I was permitted to examine, and found the mouth of the womb thick and soft, opened to the breadth of a crown-piece. I likewise felt the membranes, waters, and child's head. The complaints beginning to return, I repeated the last dose; and in about half an hour after she had taken it, she fell into a sound sleep, which lasted several hours, and awoke very much refreshed, her complaints being entirely removed. All that day she felt no labour-pains; and as she was very weak, I directed her to take frequently a small draught of pretty strong chicken-broth, by which she was gradually recruited. She slept well that night, and in the morning was taken in labour, which proved tedious and lingering, though she was at last delivered of a large child, which was dead, and in about six weeks she was perfectly recovered.

I was again called to a gentlewoman attacked by a violent superpurgation, in consequence of having caught cold, by sitting in an open chaise in rainy weather, when she was eight months gone in her second pregnancy. She had been exhausted by the evacuation the preceding day and night; during which she enjoyed no repose: and in the morning, when I was called, I found her pulse weak and slow, and her extremities cold; and she told me, that in straining upon the stool, she had something like labour-pains. I immediately prescribed the following bolus and draught.—*R* Theriac. andromach.  $\mathfrak{z}$ ij. sumend. cum haustu sequenti.—*R* Aq. cinnamom. simp.  $\mathfrak{z}$ js. Nuc. moschat.  $\mathfrak{z}$ ss. Liquid laudan. gut. v. fyr. e meconio  $\mathfrak{z}$ ij. M.—I directed her to drink plentifully of white-wine whey; and ordered warm bricks, wrapped in flannel, to be applied to her legs and arms, in order to restore the natural heat, to promote a sweat, and encourage rest. In the mean time I examined and found the os uteri largely open, and the head presenting; and by feeling the hairy scalp, perceived the membranes were broken. In consequence of what I had prescribed, her extremities became warmer, her pulse rose, she fell into a breathing sweat, and slept three hours; but being waked by a pain and fresh straining, I ordered her to take half the quantity of the former prescription, by which means she was again relieved, dropped asleep, and, when she awaked in the evening, was quite free from the pain, griping, and straining, though still very weak and feeble. To obviate this complaint, I directed her to take every now and then some burnt red-wine, with nutmeg and toast, and in the interval some chicken-broth. She continued easy the night following: when I called next day, she told me she had some slight pains; and I found the child's head lower in the pelvis. The pains increased, and in two hours after I arrived, the child was delivered.

I have often known, in such cases, premature labour-pains vanish, and the woman proceed to her full time.

### NUMB. V. CASE I. and II.

#### FROM CONVULSIONS.

**I** WAS called to a woman by a midwife, who told me that the labour had proceeded very well; that the membranes had not broken until the mouth of the womb was largely opened; but that the head was no sooner forced into the upper part of the pelvis, than the patient was thrown into violent convulsions, which went off and returned with every pain. She was a strong young woman, of a florid complexion. This was her first child: her pulse being full, hard, and quick, ten ounces of blood were immediately taken from her arm: the convulsions abated every pain, until they went off entirely; and in about an hour after they left her, she was safely delivered.

A woman in her third pregnancy, near her full time, being taken with a giddiness, which was immediately followed by strong convulsions, I was called by the midwife, and examining in time of a convulsion, found the mouth of the womb open, and the convulsion forcing down the membranes and waters in the same manner as they are usually pressed down by the labour-pains. She was insensible, and these fits returned every six or eight minutes. Her pulse being very quick and full, I ordered her to be bled to the quantity of ten ounces, and a blister to be applied to her back. In consequence of these remedies, the convulsions abated, and soon went off; but she was still insensible, and incapable of swallowing any kind of liquid. The friends being averse to my delivering her, I desired, that in case the convulsions should return, I might be immediately called in order to deliver her, otherwise she would certainly be lost. My prognostic was literally verified, for in about an hour after I went away, they returned with such violence, that she expired before I could reach the house; but the child was delivered during one of the fits.

I attended several patients who were attacked in this manner near their full time, some of whom were relieved by bleeding and blistering, and went on to the usual period; while others, with whom this method did not succeed, were, with the children, saved by immediate delivery. Other practitioners had cases of this kind during the same time; so that they seem to have proceeded from the constitution of the weather.—*Vide* part iii. collect. xxxiii. No. iii.

### CASE III.

*Communicated by Mr. Mudge, of Plymouth.*

**H**E bled a woman in the morning, in the ninth month of her pregnancy, who complained of a violent head-ach. He was again called in the evening, when she was seized with convulsions, for which he prescribed a clyster, blisters, a nervous mixture, and drops. At nine the fits became more violent, and continued longer; and concluding that immediate delivery was absolutely necessary to save her life, he examined by the touch; then putting the patient in a proper position, he introduced his hand into the vagina, and tried to dilate the os uteri, which was very rigid, scarce so open as to admit a quill, and at first very difficult to be distinguished.

After several unsuccessful trials with his finger, he was obliged to desist, in hope that it might be better disposed to dilate by next morning; before which

which time, however, he was twice called in the night, found her in continual convulsions, and no alterations in the parts. About noon next day, he visited and found her convulsed without intermission, though the force of the fits had not dilated the os uteri in the least; neither could her mouth be opened so as to receive any medicine. At seven in the evening he was called in a great hurry, when the midwife told him, that now the child's head was in the passage. He could scarce believe this information, which, however, he found literally true, and sent for his forceps to assist in delivery; but just as he was about to apply them, the head was forced down by the convulsions; he then delivered the body, and afterwards extracted the placenta, and the convulsions immediately abated.

## N U M B. VI. C A S E I. and II.

### FROM FEVERS.

**D**URING the time of a pleuretic fever that was epidemical, and often proved mortal if the patient was not plentifully bled at the first attack, I was called to a gentlewoman in the seventh month of her pregnancy, who had bore several children. She was suddenly seized with violent itches in her right side, and a great difficulty in breathing; for which she immediately lost ten ounces of blood. From other patients, attacked with the same disease, I had taken twenty ounces; and, by repeating this evacuation once or twice, had frequently carried off the inflammation and fever; while those who were bled too sparingly, or too late, sunk under the disease; but I did not venture to bleed this patient to such a quantity, on account of her condition. Nevertheless, as the symptoms were alleviated, though nor removed, by the first venæsection, I followed Sydenham's method in prescribing plenty of diluents, and next morning repeated the bleeding to the same quantity. Upon my first arrival, I had sent for an eminent physician, who lived at some distance, and he approved of what I had done; advising, that as it would be hazardous to take a large quantity at once from a person in her condition, she might be bled the oftener; and this method being followed, in two or three days relieved all her complaints, having prevented a suppuration, perhaps a mortification, of the pleura. Though much exhausted by these evacuations, she gradually recovered strength to proceed in her pregnancy; and in a fortnight after her recovery, was safely, though prematurely, delivered of a weak child, which did not long survive the birth.

I was again called to a woman in the ninth month of her fourth pregnancy, who was seized with a violent fever, in consequence of having caught cold. She complained of a racking head-ach, was between whiles delirious, and on the fifth day of the fever, when I was called, fell into labour. I felt her pulse, which was quick, low, and intermitting: she laboured under a *subfultus tendinum*, and was in a little time delivered of a very weak child, that soon died: her delivery was attended with inconsiderable discharges, and she expired that same evening.

I have attended in many cases, at different periods of pregnancy, in the beginning, increase, height, and declension of fevers, and the patient commonly recovered, if miscarriage or delivery happened at the beginning or declension, provided the discharges were not extraordinary: but when the fever was violent and at the height, the patient usually died; and the child was frequently dead when delivered in the decline of the fever.



## NUMB. VII. CASE I. and II.

## FROM THE SMALL-POX.

THE observations I have made on fevers will also hold good in the small-pox:—I delivered a gentle woman who had the confluent small-pox in the fifth month of her pregnancy; from which she recovered, and proceeded to the full time. No marks of the distemper appeared upon the child, which had not been dead many days before delivery; but the head was dropsical, and could not be protruded by the pains until the water was discharged by perforation.

Mr. Cook, who attended me some time ago, communicated the following case, an account of which he received from the country:—A gentle woman at Oswestry, in Shropshire, aged twenty-eight, was, in the seventh month of pregnancy, on the 24th day of February, seized with the symptoms of the small-pox; and on the 28th the eruption appeared very quick and small: A physician from Shrewsbury being called, found them of the confluent kind, with petechial spots; and prescribed decoct. cort. Peruv. cum elix. vitriol. & tinct. rosar. pro potu communi. She recovered of this disorder, and was, on the 29th of April following, delivered of a dead child, upon whose body the eruptions appeared to have been about the crisis.

## COLLECTION XIX.

*Of circumvolutions and knots of the funis umbilicalis, contractions of the uterus before the shoulders, &c.*

## NUMB. I. CASE I. and II.

## OF CIRCUMVOLUTIONS. [Vide Tab. ix.]

I WAS called to a gentlewoman in the eighth month of her pregnancy, by Mrs. Canon, who told me the labour had been very tedious: the head had been advanced to the os externum for near two hours, but was drawn up again after every pain. The patient being averse to my examination, I advised the midwife to introduce a finger or two in the rectum during a strong pain, when the head was low down, and pressing against the forehead at the root of the nose, keep the head in that position for a few pains. By this method the patient was soon delivered of a dead child, round whose neck the funis was four times circumvolved.

I was called to another gentlewoman in labour of her first child, whose os uteri dilated with the membranes and waters in a slow and gradual manner, until it was fully opened, when the membranes protruding to the os externum, were broken; then the head came down to the middle of the pelvis, and being pushed farther in time of a strong pain, it was drawn back to the same place as the pain abated, and continued to advance and retreat in this manner for several hours, so that the patient was very much fatigued, and her friends began to be very uneasy.

That I might examine more narrowly, I began to dilate and open gently the os externum during every pain, until I could easily introduce my fingers all round the lower part of the child's head, so as to perceive that the delivery was not retarded by the largeness of the head, or the smallness of the pelvis; neither could it be delayed by the contraction of the uterus

before the shoulders, because the head began to be drawn upwards, immediately after the membranes broke; and the contraction seldom happens until all the waters are discharged. From these circumstances, I concluded that the difficulty proceeded from the circumvolutions of the funis umbilicalis round the neck of the child. The left ear of the fœtus was to the left groin of the woman, and its right ear to her right side, betwixt the sacrum and the ischium, the forehead being to the left.

I resolved to assist in bringing the head lower, and keeping it so with the help of the forceps, had it continued much longer in that situation; but as she had every now and then a strong pain, I first tried what might be effected by different positions, and directed her to bear the pains standing, sitting, kneeling, lying on one side, or resting on the bed in a posture between sitting and lying. This last was the most successful, and in three or four strong pains, the head, though still retracted, advanced lower and lower, and began to dilate the os externum. But observing that it made another stop, I introduced two fingers into the rectum, when it was pushed down by a strong pain, and pressing them against the lower part of the forehead, kept it down, and prevented the head from returning until the return of the next pain. I continued this method, in consequence of which, the head advanced farther and farther, and assisted the delivery of it, by raising the forehead upward, with an half round turn from the lower part of the os externum. The woman was soon delivered, and the funis was found three times round the neck, and once round the arms of the child.

The hint of assisting in this manner, I found in Mr. Oald's Treatise, published in the year 1742; and I have frequently followed it with success; when the forehead was come down to the os coccygis; but when it advances still lower, I withdraw my fingers from the rectum, in order to prevent a contusion of that part, as well as of the vagina, and press with my fingers on the external parts, and on each side of the coccyx. Care, however, must be taken to avoid the eyes in this pressure, otherwise they will be afterwards inflamed.

I must observe, that this assistance is not to be used, except when the head comes low down, without continuing to stretch the os externum; for although it retracted after every pain, yet if, by advancing a little in the time of a pain it dilates this part, such gradual dilatation is much more safe for the woman than a sudden distention, by which the parts are in danger of being inflamed or lacerated.

### C A S E III. and IV.

**I** HAVE in this manner assisted in a few cases where delivery was retarded by the shortness of the funis; particularly in one patient who was delivered by the forceps; and in another who was delivered by the labour-pains, assisted in the manner described above. In this last case the funis was not above two hand-breadths long, though very thick.

Mauriceau, in p. 336, and observ. 406, relates an instance of his having delivered a woman of her first child, whose navel-string was extremely short, and as thick as its arm. The child had been dead several days before delivery.

It may be proper to observe, that when labour is retarded by the shortness or circumvolution of the funis, the retraction or drawing back of the head does not begin to be perceived until it is low in the pelvis; whereas

it is sooner observable when owing to the contraction of the uterus before the shoulders. The head is also low down before it can be retarded by one of the shoulders resting above the os pubis or sacrum, instead of being towards the sides at the brim of the pelvis.

## NUMB. II. CASES I. II. and III.

OF KNOTS. [Vide tab. xxix.]

**M**Y attendance was bespoke to a woman, who imagined herself in labour about the end of the eighth month. This, however, was no other than a colicky pain, proceeding from costiveness, of which she was relieved by a clyster.—In a fortnight after this visit, I was called, and found the membranes had broken; the waters were of a brownish colour and mortified smell: the labour was lingering, and the child, when delivered, of a livid hue; the scarf-skin was easily stripped off, the abdomen tumid, and the funis swelled and livid, about ten hand-breadths long, with a tight-drawn knot on the middle.

I attended another patient in a lingering labour, and delivered her of a live child, though there was a loose knot on the funis, which was very long.

I assisted in another case, where the funis, being nine hand-breadths long, had a loose knot on it, and was twisted round the neck of the child, which was dead; though I believe its death did not proceed from the knot, or circumvolution, which was very loose, but from the nature of the labour, which was very lingering, the head being squeezed to a great length, and the brain too long compressed in a narrow pelvis.

## NUMB. III. CASE I.

*Of contractions of the uterus before the shoulders, and these last resting above the pubes or sacrum. [Vide tab. xiv.]*

**B**Y the following case, I discovered that labours are often rendered tedious and lingering by the lower part of the uterus contracting before the shoulders, when the membranes break and the waters are too soon evacuated: this contraction not only keeps up the body of the child, but sometimes prevents the shoulders from turning to the upper part of the pubes to the side of the pelvis where it is widest. I was called by a midwife to a woman thirty-five years of age, in labour of her first child, the membranes having been broken a long time. I found the head presented almost as low as the middle of the pelvis, and that the os internum was fully open, and the pains strong and frequent, yet the head did not advance, but receded a little after every pain, a circumstance which at first I imputed to the funis.

Finding the woman very uneasy, and her friends importunate, I amused them with a palatable mixture, of which I directed the patient to take two spoonfuls every half-hour, my intention being to gain time; for I felt the child's ear at the upper part of the pubes, the head was small and very little engaged in the pelvis, and I could foresee nothing dangerous in the case. I accordingly took my leave, after having assured them she was in a fair way, and would in a little time be safely delivered by the midwife. In about two hours, I received another call, and was told the medicine had done her no service. I likewise understood from the midwife, that the child's head was very little advanced, and that she had kept her in an easy position, according



according to my direction. When I examined, during a strong pain, I found the head lower down, but as the pain abated, it was drawn back to its former place: upon which I turned her upon her side, in order to bring down the head with the forceps, but first resolved to try what could be done by dilating the parts. Accordingly, placing her breech to the bed side, I gradually opened the os externum during every pain, introduced my hand up the vagina, and with great difficulty raised the head above the brim of the pelvis. In pushing up my hand, on the posterior part between the os uteri and head, I felt the lower part of the womb strongly contracted round the child's neck; then, by continuing to push up farther, I raised the child, and gradually stretched the contracted part; so that when I withdrew my hand, a strong pain immediately followed, and forced down the head to the lower part of the pelvis; and in a few subsequent pains the child was delivered.

Although the child is not large, nor the pelvis small, labour is frequently retarded by such contractions, when the membranes are broken too soon: so that practitioners should avoid breaking them until the mouth of the womb is fully opened, that the head, by descending immediately into the pelvis, may plug it up, and prevent the waters from being too soon discharged. Except, however, in cases of flooding, where the less difficulty or danger must yield to the greater, and the membranes be broken in order to stay the hæmorrhage.

By those contractions, the child's head is seldom kept up so long as in the case described above, but is gradually pushed lower down; and the labour is more or less lingering, according to the degree of contraction, and the strength or weakness of the pains. In a word, there is seldom occasion to assist until the pains fail, as we shall observe in the laborious cases.

## COLLECTION XX.

*Of lingering cases from the large size of the child, and the hydrocephalus.*

### NUMB. I. CASE I.

FROM THE LARGE SIZE OF THE CHILD.

[Vide Tab. xxi. xxvii. and xxviii.]

**I** WAS called to a woman, whose friends told me she had been three days in labour, and that the midwife, who had lost her opportunity, was keeping her in hand. She, however, in her own vindication, gave me to understand that she had delivered the patient twice before; that the first labour was lingering, and the child, which was small, came before the time; that the second was also tedious, and the child, which was large, still-born, because they had sent for her when it was too late to save it by making more room; that, in order to obviate the like misfortune upon this occasion, she had been called in good time, and considerably dilated the parts; but when the waters were discharged, the pains had not been strong enough to deliver the child. She likewise affirmed, that when she was called, there was no opening of the os internum, which did not begin till the preceding night; but that the woman laboured under a colic, attended with a looseless, which had been stopped by something prescribed by

by the apothecary, upon which the pains grew stronger; and that she, the midwife, had lost no time, but tried all the different positions, and dilated the parts during every pain. Indeed, the looseness had exhausted the patient; and she was moreover fatigued by this unskilful management of the midwife, who was extremely ignorant, had never received the least instruction, and seemed incapable of profiting by her mistakes in practice.

When I first examined, I found the mouth of the womb pretty largely opened, but thick and swelled; the external parts were likewise tumid and inflamed. I afterwards, during another pain, felt the head presenting, though very high up. Her pulse being low and quick, I directed the attendants to put her to bed, and keep her as quiet as possible. As she was troubled with a great drought I desired her to drink barley-water, and take now and then a little weak broth, with toasted bread; and lastly, in order to amuse herself and friends, I prescribed a draught of syrup and simple waters to be repeated every two hours. Then exhorting her to disregard the trifling pains she had, I assured her they would grow stronger, and assist the delivery with better effect, after she should have enjoyed a refreshing sleep. Having given these directions, I took my leave about eight in the morning, and returning in the evening, was informed that she had slept very sound for five or six hours, sweated plentifully, and undergone every now and then a smart pain.

Finding the parts much softer, the heat abated, and the pains gradually pushing down the head of the child into the pelvis, I encouraged the patient, telling her she was now in a good way, though, in consequence of her weakness, her delivery would require some time, and therefore she ought to exert her patience. I likewise privately directed the midwife to let her rest in bed, and sleep as much as possible, without fatiguing her by a repetition of her former conduct. But notwithstanding this express admonition, when I was called early next morning, I understood she had acted diametrically opposite to my advice, by raising her out of bed, and harassing her in the manner already described, so that she was quite sunk and dispirited, and the external parts were inflamed and swelled as before. She was immediately replaced in bed, and a pultice of bread and milk being applied to the parts, I waited to see the event. She slept and sweated a good deal, and when waked with a pain, took some broth, warm wine and water, and caudle alternately, so as to be much recruited and refreshed; the inflammation also abated; upon which the pultice was removed, and the part cleaned; and the pains growing stronger, she was delivered about noon, of a dead child, whose head was squeezed to a great length.

I afterwards delivered this woman three times, and the children were all uncommonly large; but by giving her time, and keeping up her strength, she was safely brought to bed, and they were all alive.

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### C A S E II. and III.

**B** EING called, in the evening, to a patient by the midwife, who told me the woman had been long in labour of her first child, that the os uteri had gradually and slowly opened, that the waters had been discharged a great many hours, and that the child's head did not advance, I found, upon examination, the head was come down to the middle of the pelvis; and the woman being strong, with a quick, full, hard pulse, was bled to the

the quantity of ten ounces. She was kept quiet in bed, and slept between the pains, every second or third of which was pretty strong. I desired the midwife to indulge her with all possible rest, and send to me if she should turn weaker, and could not be delivered by the pains.

Accordingly, I was called next morning, when I found the child's head advanced to the lower part of the pelvis; but the patient being exhausted, and her pains growing weaker, I resolved to deliver by turning the child, or if that should not be practicable, to assist with the fillet or crotchet. (I then did not know the method of delivering with the forceps.) After having gradually opened the os externum with my fingers, I tried to raise the head, and introduce my hand into the uterus, so as to reach the feet: but the contraction was so great, that I could not advance farther than the upper part of the vagina: upon which I determined to use the fillet; when a strong pain coming on, as I withdrew my hand, the head descended lower, and in two more pains the woman was delivered of a child, whose head was squeezed to a great length. By this method I have several times succeeded in such cases.

Some time after, I was called to another woman, who had been long in labour of her third child. When I first examined, I thought I felt the breech of the child; but afterwards found it was a large tumour on the child's head, which was pretty low in the pelvis. The patient had been much fatigued by the imprudent management of the midwife; the pains had turned weak, and her pulse was low. I directed her to be put to bed, to take something warm, and try to doze between the pains. By this method her exhausted spirits were recruited, and her pains grew stronger; I assisted as in the preceding case, and she was delivered of a dead child, with a large head squeezed to a great length.

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#### C A S E IV. V. and VI.

**I** WAS called to a patient whom I had delivered twice before: in her first labour I used the crotchet, in the second I tried the fillet, but without success; upon which I brought the child by the feet, though I could not save it, because the head was very large.

Having found by experience that several children were lost by using these expedients prematurely, and by turning the child when a large head presented in a narrow pelvis, I resolved to manage this case in a more cautious manner, and desired that I might be called in time,

Accordingly, when I arrived, the midwife told me, that the patient had not been fatigued, and only once examined; the mouth of the womb was largely opened; and the gentlewoman being of a weakly constitution, I kept her chiefly in bed. The waters broke soon after my arrival; the labour was very tedious from the largeness of the head, which advanced very slowly in the pelvis; but by encouraging and keeping up her strength, she was at last safely delivered.

In the same year, I attended another patient who had been long in labour, and whose waters were discharged many hours before I arrived. I found the mouth of the womb largely opened, the child's head advanced to the middle of the pelvis, the patient very much fatigued, and the midwife told me her pains had been strong, but were much abated. As I could not turn the child, I made a noose on a garter, which I with great difficulty fixed over the fore and hindhead, and pulled gently during every pain; but, not succeeding, I increased the force until the noose slipped off. Then resolving



resolving to try what nature would do, I prescribed a gentle opiate; and she being kept quiet in bed, enjoyed between the pains some refreshing slumbers, by which her strength was gradually recruited, and the pains growing stronger, she was in about two hours safely delivered. The fillet had galled and inflamed the hairy scalp of the child, which, however, in consequence of proper applications, recovered in a few days.

In the year following, I attended a gentlewoman in the city, in labour of her first child. She was young, strong, and healthy, had gone a month beyond the common time of reckoning, and the case was very tedious; for after the membranes had broken, and the child's head advanced a little in the pelvis, she underwent many severe pains for the space of four hours, before it descended to the lower part, where it continued two hours longer before she was delivered.

I perceived that the greatest difficulty proceeded from the large size of the head; and she being strong and the pains brisk, I thought nothing should be done but to encourage and prevent her from being fatigued. However, before she was delivered, her spirits and pains began to flag, and her friends became very anxious and uneasy; indeed I myself was not without apprehension that both she and the child would be lost.

Though the pains were most effectual while she continued in bed betwixt a sitting and lying posture, when they began to grow weak, I resolved, as the head was low down, to assist with the forceps: but before I used that expedient, I thought proper to alter the position, and try what would be the effect of her taking some pains standing, a posture which had succeeded in other cases. She was accordingly taken out of bed, and some loose clothes being put on, supported between two women. Her pains increased in consequence of this alteration; and after she had undergone several severe ones, I found the child's head began to move lower and lower, and protrude the parts, in form of a large tumour. Then she was put to bed again, and with great difficulty I saved the perinæum from being torn. After the head was delivered, it required great force to bring along the shoulders: indeed this was the largest child I ever brought into the world alive.

The head was squeezed to a great length, had a large tumour at the vertex, and if the mother's pelvis had not been very large, the child could not possibly have been saved.

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#### C A S E VII.

**M**Y assistance was required to a patient about the age of forty, in labour of her first child; though I was not permitted to examine, but obliged to wait in another apartment, in case of accidents. By the midwife's information from time to time, I understood the child advanced very slowly after the os uteri was largely opened, and the membranes had broken; and that the pains, though seldom, were pretty strong.

In this manner labour proceeded for the space of twelve hours, at the expiration of which, the midwife told me, that although she had at first found the child was alive by moving its head, she was afraid it was now dead, for the pains had flagged for a long time, and a small part of the head had been for two hours without the external parts. However, the child was delivered soon after she gave me this account, and appeared to have been but a very little time dead; and, in all probability, when the head was fo

so low, and the pains abated, it might have been saved by the assistance of the forceps, which seldom or never fail when things are in that situation.

I afterwards learned, that the thyness of the patient proceeded from the artful insinuations of the midwife, who terrified her with dreadful accounts of the use of instruments.

## NUMB. II. CASE I. and II.

### FROM THE HYDROCEPHALUS.

**A**T TENDING a gentlewoman in labour of her fourth child, I felt the membranes pushed down, and the os internum and os externum largely opened. Before the membranes broke, the child's head continued a long time high up at the brim of the pelvis; and felt in such an uncommon manner, that I was for some time uncertain whether it was the head or breech. But the waters being discharged, it was pushed a little lower down; then I felt the hairy scalp; and perceived that the head was dropsical, from the looseness of the bones, and the great distance between them. After many severe pains, the scalp was protruded to the os externum, which the contained water distended to such a degree, that the head passed, and the child, which was presently delivered, seemed to have been dead but a very little time.

I was called to another patient in labour of her first child. The membranes and waters opened the os uteri in a very slow manner; and when they came down to the middle of the vagina, felt as if there had been one set of membranes within another, though the internal seemed to be much thicker than the external. But before the os uteri was fully opened, the real membranes broke, and then I discovered the other was the hairy scalp, pushed down by water contained in the skull. This the pains forced down lower and lower; so that the os internum being fully opened, it stretched the vagina and os externum in the same manner as they are commonly dilated by the membranes and waters of the secundines; and I felt the bones of the skull loose, and riding one upon another.

At length the head being delivered, I was obliged to exert a good deal of force in bringing along the shoulders and body, because the belly was swelled. The funis was tumified and livid; the child seemed to have been dead for the space of eight or ten days; and there was a large quantity of water contained in its head.

## COLLECTION XXI.

*Of lingering cases, from a small, narrow, or distorted pelvis.*

### NUMB. I. CASE I.

[ Vide tab. xxvii. and xxviii. ]

**A**LTHOUGH these labours may seem to be of the same class, and require the same management with those that proceed from a large head, there is an essential difference; for though they are much the same with regard to the efforts of the woman, the operation in these has much less room when he is obliged to assist with his hand, and the child's head is disfigured and compressed into large indentations, occasioned by the jutting in of the upper part of the sacrum and vertebræ of the loins.

I was

I was bespoke to attend a woman of a middling size, and to appearance well made, who had been three times before delivered of dead children. The first presented with the arm, and the midwife having kept her two days in hand, with promises of safe delivery, the friends called a gentleman of the profession, who, with great difficulty, extracted the child by the feet, and was so much fatigued with the operation, that he was obliged to keep his bed for several days. In her next child I was employed, after she had been weakened and exhausted by another midwife, who, with great self-sufficiency, had undertaken to bring matters to a happy issue.

Having waited a long time to no purpose, I tried the forceps; and these failing, dilated the cranium, according to the method described in laborious births. Then I found the difficulty proceeded from the large size of the head, and the jutting in of the upper part of the sacrum, which was not above three inches and a half from the os pubis. In her third labour, I attended by myself; but the breech unluckily presenting, and the child being very large, I could not possibly save it; for I was obliged to use the curved crotchet in delivering the head, to the great grief and mortification of the poor mother, who had suffered so much, and lost three children.

When I was called to her in labour of her fourth child, the mouth of the womb was open to about the breadth of a shilling, and the child's head rested on the upper part of the pubes, but was thrown a little more forward than usual, by the jutting in of the upper part of the sacrum and the last vertebra of the loins. Labour being just begun, I encouraged the patient, by telling her, that I had saved many children, even where the pelvis was narrower than her's; and that I was now in great hopes of succeeding; provided the child was not of an extraordinary size. As she had slept but little the preceding night, and her pulse was rather full, I ordered ten ounces of blood to be taken from her arm, and her intestines to be emptied by a clyster; and taking my leave in the morning, desired the nurse would not send for me until the membranes should be broken: She was accordingly kept quiet in bed, and enjoyed some refreshing sleep; and in the evening I received a message: then the membranes were broken, the mouth of the womb being largely opened, and the head beginning to be squeezed in at the upper part of the pelvis; but when the membranes gave way, the pains abated, as is commonly the case when the head is not small or the pelvis large: for the pains she had hitherto undergone proceeded from the membranes stretching the mouth of the womb; and now the head being kept up, did not continue the distention of these parts, but locked them up so as to detain a quantity of waters still in the uterus.

I went away again, desiring the nurse to send for me when the pains should return and grow stronger; and in about three hours I returned, in consequence of another call, when I understood a great many cloths had been wetted, and that the pains were become stronger and more frequent. I then felt the child's head squeezed lower down; and but little water being discharged in time of a pain, I concluded that the whole quantity was almost expended, and that the uterus was close contracted to the body of the child.

As the patient had been chiefly in bed during the whole day, I directed her to take her pains in a sitting posture, and now and then to walk about without fatiguing herself. She therefore sat in an easy chair, leaning backwards; and in this manner took her pains, until towards morning, being very much fatigued, she was again put into bed, and laid on her back: her shoulders being raised with pillows, so as that her posture was between sitting



ting and lying, I desired her, in time of a pain, to pull up her legs, while an assistant supported her feet, and directed her not to force down, except when the pain was strong. The head continued to advance very slowly; the bones of the cranium riding over one another; the vertex was squeezed down in a conical form to the lower part of the ischium, the forehead being at the upper part of the right, or rather above the brim of the pelvis on that side; the fontanel was still very high up, and I felt the ear at the os pubis. At every third or fourth pain, which was generally the strongest, the head advanced, and the occiput was gradually raised to the space below the pubes, the forehead turning backward to the lower part of the sacrum and coccyx.

The head being now so low down, and disengaged from its confinement and pressure at the upper part of the pelvis, proceeded much more easily than before; however, as the child was large, and might be lost in being detained too long by the contraction of the uterus before the shoulders, I assisted a little when the forehead was come down to the lower part of the coccyx, by placing my fingers on each side of it, in time of a strong pain, in order to press the head forward to the space below the pubes, and prevent its being drawn back upon the abatement or cessation of the pain.

The head being delivered, I was fain to use a good deal of force in extracting the shoulders; for although I had brought them down to the lower part of the ischium, I could not effect the delivery until I introduced a finger above one of them, up to the middle of the arm, and, by pressing toward the sacrum, brought it down with an half-round turn; upon which the body followed.

The circulation in the funis being stopped, the child, which was very large, and whose head was compressed in a longitudinal form, lay five or six minutes before it began to breathe.

The woman recovered of this much better than of her former labours.

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### C A S E II. and III.

**T**HREE years after, I delivered the same patient of another child, when the labour proceeded much in the same manner; with this difference, however, that the membranes were unluckily broken by her motion of getting out of bed before she had any pains. I being called in consequence of this accident, found the os uteri soft and yielding, though very little open, and the child's head resting above the os pubis, as in the former case. She was bled, and received a clyster, as in the preceding case; but as the pains were not begun, and I was engaged at another labour, I left a midwife, with proper directions how to manage when the pains should come on, until I should be at leisure to come and attend her.

Soon after I went away the pains began, and a large quantity of waters was from time to time discharged. When I returned in the evening, I found the os uteri pretty largely opened, and the head pushed down to about one-third of the pelvis; and taking it for granted that she would have many more strong pains and that all the waters were not yet discharged, I lay down in a bed to take some rest, because I had been much fatigued the night before, and desired the midwife to call me as soon as the head should be come down to the lower part of the pelvis. The patient bore many severe pains with extraordinary courage; the child's head was in the situation described for about three hours after I went to bed; and in half an hour after I rose, the woman was safely delivered of a live child. Since the

the publishing of the above she has been twice delivered in the same cautious manner by Mrs. Maddocks, on my account; and the children were live-born and did well.

I attended another woman whose pelvis was also distorted, and rather smaller and narrower than that described in the preceding case. She had, the year before, been long in labour, and much exhausted, before she was delivered by another gentleman, who was obliged to open the child's head.

Being called at the beginning of this second labour, I managed her much in the same manner above described, and with great difficulty saved the child, which was small: but when I attended her again in her next lying-in, I could not save the child; which though larger than the former, was not above the common size.—*Vide* the crotchet cases.

#### C A S E IV.

**M**Y attendance was bespoke to a woman who had been four times delivered by another gentleman of dead children; and it was alledged her pelvis was so narrow and ill-formed, that she could not possibly bear a live child.

I was averse to interfere with any other practitioner; and actually refused to undertake the case, until I was importuned by two of her acquaintance whom I had delivered, and assured that the other gentleman would never be employed again at any rate: upon these representations I promised to attend this patient, who was a little woman of a delicate constitution subject to ictical complaints; for which I advised her to consult some physician; though in this particular she neglected my advice, on the supposition that her health was mending.

Soon after my first visit, I was called to her when she imagined herself in labour, and found the mouth of the womb but very little open, though soft and yielding. Her pains seemed to proceed from her being costive; yet I felt the head resting above the pubes, and was agreeably surprised to find the pelvis was not so narrow as it had been described; for with the tip of my finger I could hardly reach the jutting forward of the last vertebra of the loins and upper part of the sacrum; from which circumstance, I understood the pelvis, at that part, was not half or three quarters of an inch narrower than those that are well formed. I therefore hoped, that if the child was not large it might be saved, provided I could keep up the woman's strength. With this view, after having encouraged her, by communicating my opinion, I prescribed a clyster; after the operation of which she took the following draught:—*R* Aq. cinnamom. simp. ʒiss. cum spiritu ʒij. Confect. damoerat. ʒss. Syr. e. mec. nio ʒij. *M.*

It was now late; and I being uncertain when labour would begin, staid with her during the best part of the night, but went away as soon as the draught had thrown her into a profound sleep. She was free from pain all next day; but I was called the following morning, when I understood she had trifling pains in the night, though she had slept in the intervals. I found the waters pushing down the membranes, and the mouth of the womb open to about the breadth of a crown; and she being weary with lying, I advised her to rise and take her breakfast. Having sat with her about two hours, during which the pains were but slight and returned seldom, and believing they would not grow much stronger until the mouth of the womb should be fully opened, the membranes broken, and the waters discharged, I proposed to go and visit some other patients; and laid injunctions upon

the nurse to put the woman to bed, and sent for me as soon as matters should be thus ripened.

She seemed uneasy at my going, and afraid I would not return. She observed, she had been already two days in labour; that the other gentleman would not have waited so long, but have delivered her before this time, either by turning the child, or extracting it with instruments: the nurse, too, made reflections of the same nature.

I paid very little regard to what they said of my predecessor, because I could not pretend to judge of his practice, unless I had been present, and known the particular circumstances: and nothing can be more absurd than to justify or condemn upon the hearsay of ignorant people, who are always apt to run into extremes of praise or censure.

I therefore told her she had not been in real labour till the night before; that I would do every thing in my power for the safety of herself and the child; and begged, that if she was in the least diffident of my skill, she would send for the person who formerly delivered her; for I would not attempt to force matters, as there was really no danger, even if the labour should continue eight days longer. This declaration quieted the anxiety of the patient and nurse; and I was permitted to go away, after I had promised to return upon the first notice, which was about eleven; but at two I was sent for in a great hurry. The nurse had put her to bed; and I, during a strong pain, felt the membranes pushing down large and full through the os externum. As the pain went off, and they were relaxed, I perceived the head was at the lower part of the pelvis. I had scarcely time to put on a night-gown when another pain returned; and the woman was immediately delivered of a small child.

From the easiness of the birth, and the round form of the head, which was not at all compressed, I am inclined to believe, that though the child had been of an ordinary size it would have been saved.

The patient recovered much better and sooner after this than after her former deliveries, the jaundice vanished, and in two months she was healthier and stronger than she had been for many years.

## N U M B. II. C A S E I. and II.

*From inflammatory or œdematous swellings of the pudenda, scirrhus tumours, polypus, or calosity in the vagina or os uteri.—Vide sect. iii. No. v.*

A WOMAN in the latter end of her first pregnancy, had œdematous swellings in her legs, thighs, and pudenda; and being obliged to walk one day through the city, was very much fatigued, and in great pain. When I examined the parts, the swelling, which before was œdematous, seemed to have contracted an inflammatory hue; the left leg and thigh were much more tumified than those of the right side, and the skin was something of a livid colour. Twelve ounces of blood were immediately taken from her arm; she was put to bed, and in consequence of fomentations, in three days the pain and inflammation abated: but the swelling of the pudenda still continuing, I prescribed an emollient cataplasm to be frequently renewed; and from the first day she had taken two doses of gentle cooling physic. On the fifth day she was taken in labour, and though the parts were still swelled, and stretched with great difficulty, she was at last safely delivered.

The pultice was still applied, the swelling gradually subsided, and she recovered tolerably well.



In the same year, I was called by a midwife to a woman at Chelsea, who was in labour; the labia pudendi were so excessively swelled, that both patient and midwife believed the child could not possibly pass; and the tumefaction was attended with such pain, that for three days she had been obliged to keep her bed, and lie on her back, without daring to alter that position. When I examined her during a pain, I found the os uteri very little open; and thence concluding labour was but just beginning, I punctured the parts in several places with a lancet, a large quantity of ferous fluid was discharged, the swelling subsided, and the labour proceeded in a slow manner, until she was delivered.

Such cases have often occurred in my practice, and I never knew them attended with any bad consequence; for when the swelling is too great to permit the child to pass, it is commonly reduced by punctures; or when of the inflammatory kind, by bleeding, cataplasms, and fomentation.

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### C A S E III. and IV.

A WOMAN, in labour of her first child, was attended by a midwife, who imagined she felt the child's head, though very small, in the vagina; but examining again after a few pains, she felt that substance pushed to one side of the pelvis, and the membranes and waters forcing down at the other; these being broken and discharged, she found something like another head come down also. She being alarmed at this strange circumstance, recourse was had to a gentleman of the profession, who, being also puzzled, made a pretence to leave her, and afterwards sent a message, desiring that another might be called, as he was indispensably engaged. But before any assistance could be procured, the woman was delivered by the labour-pains of a middle-sized child: and it was not till some months after that the substance was found to be a scirrhus tumour, or excrescence of the polyus kind, adhering to the outside of the os uteri, which was afterwards taken off by ligature:—In some few cases, after severe labour, I have felt what I supposed to be hard cicatrices, or callosities at the os uteri, vagina, and os externum, by which the delivery was retarded.

My attendance was bespoke to a woman, who had recovered with great difficulty after a former tedious labour.

When I examined, the os uteri was open to about the breadth of a crown, the membranes, with the waters, were pushed strongly down, and I felt uncommon hardnesses and strictures at the os uteri, in the vagina, and at the lower part of the os externum.

The nurse who formerly attended her, told me, that for some days after her last delivery, little fleshy substances were now and then discharged, of a blackish colour, and bad smell; and that a long time elapsed before she recovered and was able to sit up.

The labour now proceeded very slowly, until the mouth of the womb was fully opened; and the membranes breaking, the contracted vagina was gradually stretched by the head of the child; for notwithstanding the callosities which still continued, the neighbouring parts yielded by degrees, and though it was long before the os externum was sufficiently dilated, at last the child was delivered.

I managed this case with great caution, because, from the imperfect accounts of her former labour, I supposed there had been a violent inflamma-

tion, and that the callous strictures were the consequence of a partial mortification, which had been separated and cast off by nature.

I kept her mostly in bed, and during every strong pain, pressed my fingers against the head, so as to abate the force of the protrusion, and allow time for the relaxation of the strictures, by which means the labour succeeded beyond expectation.

### *NUMB. III. CASE I. II. and III.*

OF THE DETENTION OF THE SHOULDERS AND BODY OF THE CHILD;  
AFTER THE HEAD IS DELIVERED.

**I** WAS called to a patient in labour, after the child's head was delivered; as the midwife could not extract the body, though she had pulled some time with great force. I found the navel-string furrounding the neck, and luckily hooked with my finger that part of it which was next the child's belly, it was so loose as to slip over the head: I undid two other circumvolutions in the same manner, and the child being disentangled, was immediately delivered. I have, in many other cases, freed the child from the circumvolutions of the funis, in the same manner; and was disposed to believe, that it was very seldom, if ever, necessary to cut and tie this rope before the delivery of the child, until my opinion was altered by the two following instances:

I was called in a great hurry to a woman, whose delivery was retarded by the same cause described in the foregoing case, and tried to disengage the child from the circumvolutions of the funis, though without effect. Then, without waiting to make a ligature in two places, as we are commonly directed to do, I insinuated my fingers between one of the turns and the child's neck, snipped the funis in two with my scissors, and delivered the body of the child, which was dead. The face and neck were very much swelled, and in this last appeared a deep impression from the tightness of the circumvolution.

Another case of the same nature I was concerned in, and after having attempted, without success, to disengage the child, by turning the funis over the head with my finger, I made a ligature in two places, between which I snipped it asunder.

The consequence of this operation, was the immediate delivery of a strong lively child; another ligature was made near the abdomen, and the superfluity of the funis cut off.

In a few cases, I have found delivery retarded by the shortness of the funis; but the child was always safely delivered, by turning the body along the breech of the mother.

### *CASE IV. and V.*

**I** RECEIVED a sudden call to a gentlewoman in labour: the child's head had been delivered a long time, and the midwife had pulled with great force at intervals. But before I arrived, the patient was delivered of a dead child, whose shoulders were remarkably large. I have been called by midwives to many cases of this kind, in which the child was frequently lost.

I attended in another labour that was rendered tedious by the large size of the body after the head was delivered. I attempted to bring down the shoulders in the gentlest manner, according to the directions in my Treatise;

but found I could not succeed without using such force as would over-strain the neck and destroy the child; for the shoulders were so high, that I could not reach with my fingers to the arm-pits. I then introduced the blunt-hook, but could not succeed, without running the risk of breaking the arm, or over-straining the joint at the shoulder; and as the woman had strong pains, I resolved to wait their effect, without using any violence that might endanger the life of the child. Accordingly, in three pains, I brought the shoulder down to the os externum; then turning one of the arms into the hollow of the sacrum, the body followed, and the child was born alive. From this, and other cases, I have learned to wait the effect of the labour-pains, rather than to use violence in pulling at the neck.

### C A S E VI.

*Communicated in a letter from Mr. A——, at E——.*

I HAVE had lately another melancholy case in midwifery. I was sent for to a woman, aged forty, who had bore several children before. When I came, I found the frontal and parietal bones separated from the rest, and without the vagina, the brain being evacuated. I slipped up my fingers, and found the os tinæ contracted about the neck of the child, and endeavoured to pull it away, but in vain. I then sent for Mr D. and Mr S. neither of whom could come. I next sent for Mr L. who came; and I desired him to see what he could do, as my fingers were numbed. He first got one hand into the uterus, and then slipped up the fingers of the other, and brought away the child. The woman's pulse before delivery was strong, and she had little flooding: but we had not been gone a quarter of an hour when we were sent for again. They told us; that immediately after we went away, which was about five minutes after delivery, she was seized with a shivering and vomiting, and had fainted. We found her in a swoon, and held spirits to her nose; but she could not swallow, and died in about half an hour after delivery.

Quere. What was the cause of her death? Was it owing to the lypothymia, occasioned by pain or loss of blood, which indeed was not considerable? Or might it not be owing to a rupture of the internal orifice, which the vomiting seems to have indicated?

### *The Answer.*

I really think you have had your share of bad and unsuccessful cases: but in all of them, especially the last; you acted with prudence in sending for others of the profession:

In cases where the head is delivered, and the shoulders are so large, or the lower part of the uterus is so contracted, that the body cannot be brought away by pulling with moderate force; if the woman's pains have not entirely left her, or she is not in a dying condition from floodings or other symptoms, the best method is to wait for the effect of the labour-pains: for I have lately been concerned in the case of a weak woman, where the body of a live child was delivered half an hour after the head was without the os externum.

Now, as your patient was not weak, I think you might have waited and amused her with medicines; or if she had turned weak, and nature seemed insufficient, you might have pushed up your hand, and after having stretched the contracted part, tried to deliver the child. If this method had



had failed, recourse might have been had to the crotchet, as the child was already dead. This being fixed upon the body, would, by dilating the thorax or costæ, have diminished the bulk, and brought down one shoulder a great way before the other.

I cannot pretend to ascertain the cause of the woman's death.

I have been concerned in several cases, where, though the os internum was tore, the patient has recovered without vomiting or any other bad symptoms; and have known other women die, as it were instantaneously, after delivery, though I always imputed such sudden death to their being exhausted by long labour, the sudden emptying of their vessels, and a greater loss of blood than their constitution could bear.

## COLLECTION XXII.

*Of children supposed to be dead-born; of the head squeezed into different forms; of the funis not sufficiently tied, broke short, or separated in a wrong place.*

### NUMB. I. CASE I. and II.

#### OF CHILDREN SUPPOSED TO BE DEAD-BORN.

**I** WAS called by a midwife, to a woman in labour in the seventh month, who, before I arrived, had flooded a good deal, though the hæmorrhage was stopped. The patient was soon delivered of a child, to all appearance dead: and, after the midwife had tried the common methods of rubbing the temples and breast with brandy, whipping and holding onion to the mouth and nose, it was laid by in a closet. About five minutes were consumed in these experiments, and two or three minutes more, while I was prescribing some medicines to recruit the weak patient; I heard a kind of whimpering noise in the closet. Not knowing where the child was laid, I asked if there was not a kitten confined in that place. The nurse immediately ran into the closet, and brought out the child, which was alive, and afterwards reared, though with great difficulty.

I attended another woman in labour, and the navel-string presenting with the arm, I delivered the child by the feet. From the pulsation in the arteries of the funis, I knew it was alive; but I found great difficulty in delivering the head, and was obliged to rest several times before I could effect it; so that the pulsation ceased; and the child seemed to be dead, after all the common efforts were used for its recovery. Nevertheless I inflated the lungs, by blowing into the mouth through a female catheter, and the child gave one gasp; upon which I repeated the inflation at several intervals, until the child began to breathe; and it actually recovered.

### NUMB. II. CASES I. and II.

#### OF THE CHILD'S HEAD SQUEEZED INTO DIFFERENT FORMS.

**I** ATTENDED a woman who had before been subject to lingering labours, occasioned by the small size of her pelvis: at this time, however, the delivery was pretty quick; because the child was small, and the bones of the cranium easily yielded and rode one another. But the head

being

being squeezed to a great length from the face to the vertex, I pressed the palms of my hands against both these parts, and with great ease brought it to a better form.

In the course of the same year, I attended another woman who had a large and well-shaped pelvis, and had formerly been favoured with very quick labours: but on this occasion, the child being large, and the mother weak, the delivery was tedious, and though the child's head was compressed into a longitudinal form, I easily reduced it into the natural shape.

In all cases where the head was thus squeezed, I have been able to alter the form by a gentle pressure between my hands; unless it had been compressed for many hours by being retained in the pelvis, and then I have found it impossible to make an effectual alteration.

### NUMB. III, CASES I, II, and III.

OF THE FUNIS NOT SUFFICIENTLY TIED, BROKEN SHORT, OR SEPARATED IN A WRONG PLACE.

**A** WOMAN I delivered, whose case was preternatural. Though the navel-string was thicker than usual, I thought I had tied it sufficiently; and the child being laid by the fire, continued in that situation a good while before it was dressed, because the attention of myself and the attendants was engrossed by the mother, who was extremely weak and low. After she was recovered and laid properly in bed, I went towards the child, and was very much surprised to see so much blood lost, and to observe it still flowing from the funis. I no sooner discovered this, than I made another ligature on the outside of the former; and, pulling it very tight, the discharge lessened, though it did not entirely cease until I had made a third. The child, which seemed to be healthy and florid when first born, was exhausted by this hæmorrhage, and continued weak and pale for several days, until it was recovered by sucking the mother. Thick navel-strings require very firm ligatures, and a good portion of them ought to be left in the separation.

Having delivered a woman whose case was laborious, I desired one of the assistants to hold the child before the funis was cut or tied, until I should move the woman a little farther into the bed, that she might not run the risk of catching cold. The assistant, who received it in a hurry and trepidation, pulled away so suddenly, as to break the funis short from the belly; when the midwife, perceiving the child bleed excessively, took hold of the part, and pressed it firmly between her fingers and thumb. I had just room enough to make a ligature, and was obliged to take a stitch with a needle, in order to secure it from slipping.

After having delivered another patient of a small and weakly child, I tied and cut the navel-string, and put the child into the hands of a woman who pretended to great skill and experience, and had come thither to superintend my conduct. I no sooner laid hold of the funis, than feeling the ligature upon it, I was convinced that I had separated the rope between it and the child's belly, which not a little disturbed me, as I had to deal with a censorious matron. However, I recollected myself in an instant, and desired to see the child, that I might know whether or not the navel-string had bled sufficiently; for by such a discharge I had often prevented convulsions in children. I immediately perceived the blood springing out from the arteries with great force, and before I could make a proper ligature,

ture, the child had lost three or four ounces; by which evacuation it continued several days in a very weak condition. Indeed, when the child is large, and the head has long been compressed in the pelvis, I have imagined, that by tying the ligature slightly at first, so as to let the funis discharge two or three spoonfuls, convulsions have been prevented; but this was a small child, that passed easily, and could not well bear such an evacuation. Nevertheless, my mistake turned to my advantage with the knowing lady; who was very loud in my praise for having found out such an effectual and extraordinary method of preventing convulsions in children.

## COLLECTION XXIII.

*Of cases in which the placenta was with difficulty delivered.*

### CASES I. II. III.

**I** WAS called to a woman in labour in the seventh month, who flooded violently, and delivered her safely of the child; but as the placenta did not follow, I introduced my hand, and felt some parts of it hard and scirrhus, which I separated with great difficulty. The flooding, which had stopped, now returned; and the patient in a little time fell into fainting fits, and expired.

I was again called to deliver the placenta in a woman who had miscarried in the sixth month. Finding it a case of the same nature with that described above, I resolved to act with greater caution; and extracted those parts only that separated with ease, leaving such as strongly adhered, to come away of themselves. I told the midwife my reasons for acting in this manner, and prognosticated that what remained would be expelled in two or three days, and pass for common clots or coagula. This accordingly happened, without any bad consequences to the patient.

In the same year; about seven in the evening, at the desire of a physician, I visited a poor woman who had been delivered at eight in the morning; but, as the midwife had broken the funis in pulling, the placenta still remained, to the great terror of the patient and her friends. Imagining that a good deal of force would be required to extract it, I ordered the woman to be laid supine across the bed, with her breech to the side, and her legs raised up and supported by two assistants. Then anointing my hand, and introducing it into the vagina, I gradually dilated the os internum; but found the lower part of the uterus so strongly contracted, that I at first despaired of making farther progress; and the force I exerted was so great, and my hand went up so high, that I was apprehensive of tearing the uterus from the vagina. Feeling the womb roll about, under the relaxed parietes of the abdomen, I pressed one hand on the outside, to keep it down and prevent its motion, while I proceeded slowly, pushing up and stretching by intervals, with my fingers in the form of a cone. By these means, I gradually dilated the parts, though I was obliged to change hands several times, because my fingers were cramped; and at length, with great difficulty, I reached the fundus, where the placenta had been so strongly conjoined. Having gained my point thus far, I easily separated and brought it gently along.

CASES



## CASES IV. V. VI.

**I**MMEDIATELY after delivery in a laborious case, I introduced my hand to bring down the placenta, and it passed up, as I imagined, into the lower part of the uterus; pushing up farther along the navel-string, my fingers slipped into a contracted part, and the placenta felt as if it had been contained in a separate cavity from the uterus. As I pushed up, in order to dilate the contracted part, it rose up higher and higher, moving from side to side, under the relaxed parietes of the abdomen, until, by applying my other hand on the outside, I pressed down the fundus, and kept it steady. Then I gradually dilated; and insinuating my hand into the part where the placenta was confined, I felt it lying loose and detached from the funis, seemingly-retained by this contraction only; so that it was easily extracted. From this, and several other cases of the same kind, I was disposed to believe Dr. Simpson's theory concerning the contraction of the upper part of the neck of the uterus, until I found, in a great number of instances, the whole lower part of the uterus contracted, as described in the third case.

After another delivery, I found the edge of the placenta at the inside of the os uteri, and waited some time to see if it would come away of itself; but the midwife informing me that it had continued in the same situation for a considerable time before I was called, and that she had tried the common methods of pulling at the funis, and directing the patient to bear down, I introduced my right hand into the vagina, as the woman lay on her left side, and pushing up along the navel-string, found the placenta adhering to the back part of the uterus. Then grasping it with my whole hand, I attempted to separate by squeezing; this expedient failing, I attempted to part the upper edge with my fingers, but it adhered firmly at that part; and my hand being much confined, I withdrew it, and introduced the left with the back to the sacrum. I now gradually separated the lower edge of the placenta from the inferior and posterior part of the uterus; and finding it adhere firmer as I reached farther up, I pressed my fingers with greater force against these parts, which felt callous, and by degrees disengaged them from the uterus. By this time, imagining I had separated the whole placenta, I attempted to bring it along, by pulling at its lower part as well as at the funis; but these efforts proving ineffectual, I pushed up again, and made a total separation; after which I brought it away in a very ragged condition: but the woman complained of a good deal of pain, lost an uncommon quantity of blood, and continued weak for a long time. I have often thought that this hurrying method was unnecessary, and productive of many complaints to the patient; for in many cases that have since occurred in my practice, the placenta, when the edge of it was found at the mouth of the womb, has come down of itself at leisure; the woman has lost less blood, and recovered better, than where force hath been used to extract it immediately.

Being called to a woman who had been delivered several hours, the midwife told me she had at first tried gentle methods to bring down the placenta, but to no purpose; and afterwards introducing her hand along the navel-string, could not find it.

I insinuated my hand as she lay on her left side, and found the placenta contained, as it were, in a distinct cavity at the upper part and left side of the uterus; but as the patient moved from me, and could not be kept steady, and the uterus rolled about as I endeavoured to dilate the contracted

parts, I put her in the position described in the third case, and extracted the placenta in the same manner.

The appearance here was different from any I had formerly felt; there was a pretty large space for the hand in the uterus, and the placenta felt as if it had been contained in a separate cavity on one side, the entry of which would at first scarce admit two or three of my fingers.

I understood from the midwife, that the membranes had broken before delivery; that the woman was very big, and a large quantity of water had been discharged. This sudden evacuation, in all probability, was the cause of the womb contracting itself into such a cavity around the placenta.

### C A S E S VII. VIII. IX.

**I**N the same year, I was called to a woman in labour, and finding her belly pendulous, I ordered her to be laid on her back, with her shoulders low, and her breech raised. The child's head being small, she was soon delivered, and I desired the midwife to let the placenta come slowly away. Nevertheless, as it was not immediately expelled, and she was loth to lose the credit of the operation, she pulled with such force as broke the funis close to the placenta, and afterwards introduced her hand to separate, though without success. I was then called from the next room to her assistance, and being informed of the accident, took the opportunity of the patient being still in the proper position, to introduce my right hand into the uterus, to the fore-part of which I found the placenta adhering; but it was so much forwards, that I could not separate while she remained in that position; I therefore turned her on her left side, so that my hand could reach farther forward, and effected the separation.

After having delivered a woman of a dead child, I found the placenta gradually descended into the vagina, and imagining it was fully disengaged from the uterus, I helped it along, by pulling gently at its under edge, and at the navel-string. However, it was so tender, from being mortified, that some part of it was left behind; but feeling the os uteri closely contracted, and the womb itself reduced to the size of a small child's head, I thought it was pity to give the woman fresh pain by dilating the parts; and the fragments were discharged in three days, without any other inconvenience to the woman, than the bad colour and smell of the lochia, which gave no uneasiness or alarm, because I had apprised the nurse of what would happen.

I delivered the wife of a gentleman who had formerly attended my lectures. The placenta was expelled by the labour-pains, so that I did nothing but help it through the os externum; but the membranes were torn all round from the edge of it, and detained in the uterus, which was contracted as in the former case.

The gentleman agreed with me, that it was more prudent to let them come away of themselves, than to run the risk of hurting and inflaming the womb; and they were accordingly discharged in four or five days, without the least inconvenience to the patient.—*Vide* Ruyfch, tom. iii. dec. 2. p. 30.

And Mr. Portal, observ. xvi, relating to the os internum, torn by its being mistaken for the placenta.

## C A S E X.

*Communicated in a letter from Mr. —.*

**A**BOUT nine in the evening, he was sent for to a woman who had been delivered of a live child that morning, but the placenta remained; and he found her in strong hysteric or convulsion fits, which recurred almost without intermission. The placenta adhered so firmly to the uterus, that with great difficulty he separated part of it, and what came away, was brought off in several pieces, but the woman died in a few minutes after the operation.

These are only a few, from the many cases of this kind in which I have been concerned.

When I lived in the country, I was seldom called to deliver women, except in laborious and preternatural cases; and then the woman was generally so weak and fatigued, that I was afraid of waiting, and therefore extracted the placenta soon after the child was born; but if the patient was not in danger, I commonly left that office to the midwife, whose method was to proceed with patience and caution in bringing it away, by pulling gently at the funis, directing the patient to force down, or provoking her to puke, by tickling her throat with a feather.

When I settled in London, I found the practice in this particular quite different; the women were always in a fright when the placenta was not immediately delivered, when it was in the least lacerated, or when any part of it and the membranes were retained. For this reason, male practitioners were so often called; and they, from mistaken notions adopted from former writers, never failed to blame the midwives for having neglected so long to deliver the placenta, observing, that if they had been called at first, before the uterus was contracted, they could have easily prevented the bad consequences which were likely to ensue. Such insinuations alarmed the women; and, in order to avoid these reproaches for the future, the midwives did not wait as formerly, but hurried off the placenta immediately after the child. But this practice did not answer their aim; for if the placenta was torn, or any part of it, or the membranes retained, and the patient chanced to be seized with a fever, perhaps from a different cause, so as not to recover in the usual way, it was always imputed to the retention of these portions, and the midwife blamed accordingly.

I have been often amazed at the ridiculous and superstitious observations of practitioners with regard to the knots upon the funis, scirrhus appearances, and the different shape or figure of the placenta, which was often kept nine days in water, and the circumstances of the woman's recovery predicted from its colour.

I at first swam with the stream of general practice; till finding, by repeated observation, that violence ought not to be done to nature, which slowly separates and squeezes down the placenta by the gradual contraction of the uterus; and having occasion to perceive, in several instances, that the womb was as strongly contracted immediately after the delivery of the child, as I have found it several hours after delivery; I resolved to change my method, and act with less precipitation, in extracting the placenta. What helped to determine me upon this occasion, was a case in which the woman was so weak, that I durst not venture to separate, though I waited three hours, without finding the placenta at the os uteri; nevertheless, when she recovered a little, a few after-pains came on, and forced it down to the vagina.



Soon after this occurrence, in consulting Ruysch about every thing he had writ concerning women, I found him exclaiming against the premature extraction of the placenta. His authority confirmed the opinion I had already adopted, and induced me to choose a more natural way of proceeding. Either before or after I have separated the funis and given away the child, I introduce my finger into the vagina, to feel if the placenta is at the os uteri; and if this be the case, I am sure it will come down of itself at any rate. I wait some time, and commonly in ten, fifteen, or twenty minutes, the woman begins to be seized with some after-pains, which gradually separate and force it along. By pulling gently at the funis, it descends into the vagina, then taking hold of it, I bring it through the os externum. But if, after having waited a considerable time, without feeling any part of the placenta, or perceiving any natural efforts for its expulsion, I provoke the woman to retch, and if this expedient is not attended with success, I insinuate my hand gently, and deliver the cake; observing always a medium between the two extremes of practice, namely, that of delivering too soon, and that of waiting too long for its expulsion. But it must be observed, that in laborious or preternatural cases, when the woman is in danger, I commonly assist sooner.

## COLLECTION XXIV.

*Of laborious cases, when the vertex presents, and the child's head is low in the pelvis, and delivered with the fillet.*

### C A S E I.

**I** WAS in the morning called to a woman in her first pregnancy, who had been long in labour, and very much fatigued by the officiousness of the midwife. I found the child's head at the lower part of the pelvis, where, as the midwife told me, it had remained from eight o'clock the preceding night, though she had tried all the different positions; and I understood the waters had been draining off for twenty-four hours.

Having lost some children, in cases of the same nature, by turning, and others by being obliged to deliver with the crotchet, after having tried Mauriceau's fillet without success, I formed a fillet into a noose, and fixed it round the upper part of the head with my fingers, hoping to succeed, because I found the head was small by moving my fingers easily round it. Yet, before ever I attempted this method, I prescribed ten drops of liquid laudanum, by which she procured some sleep. Her strength being recruited, the pains returned, though weakly, and the head forced down a little by each, though it afterwards recoiled to its former situation; a circumstance which I at first imputed to circumsolutions of the funis, or the contraction of the os uteri round the neck of the child. The os externum having been sufficiently opened by the midwife, I tried to slide up the noose mounted on my fingers, along the side of the head; and, after many unsuccessful efforts, at length fixed it: then I pulled gently with one hand during every pain, while I pressed with the fingers of the other, at the opposite side; and thus pulling and moving from side to side, I made shift to deliver, though not without having used a great deal of force; and the hairy scalp was pretty much galled, but not so as to endanger the life of the child.

When

When I introduced the noose, I was certified that the difficulty did not proceed from the contraction of the os uteri round the neck, by feeling the os tincae at the middle of the head; and when the child was delivered, the funis was not circumvolutèd round the neck, so that I could not find out the cause that retarded the labour: I continued several years in this uncertainty, until I discovered that, in many cases, this obstruction proceeds from the contraction of the lower part of the uterus before the shoulders, or from the retention of these before the pubes.

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C A S E S II. and III.

I WAS concerned in a case of the same nature, and found the woman much weakened by frequent discharges of blood. I delivered her, in the manner described in the former case, of a child that had been dead for some days; though I was obliged to exert greater force, because the head was larger; by which means the scalp was more galled, and part of it torn from the cranium.

In another case, I tried to use the fillet upon a child which was higher in the p<sup>e</sup>vis, but could not fix it until I pushed the head above the brim; then my hand having more room, I accomplished my aim, and succeeded better in this than in the former instance; for the hairy scalp was not so much galled, because the woman had stronger pains to assist the expulsion. I tried in several other cases, without success; and was obliged to deliver with the crotchet, because the children were large. In the three cases I have related, the head being small, I attempted to turn and bring the child by the feet; but was prevented by the strong contraction of the uterus: and I am now certain, that had I then known how to use the forceps, I could have delivered with great ease, not only in these, but in several other cases where I failed with the fillet.

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COLLECTION XXV.

*Of laborious cases when the head of the child is low in the pelvis, and delivered with the forceps.*

[Vide Part. i. Book iii. Chap. 2. Sect. 4. N<sup>o</sup>. 1. Tab. xvii. xviii. and xix.]

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N U M B. I. C A S E I.

FROM WEAKNESSES AND ANXIETY OF MIND.

BEING called in the evening to one of the poor women who admitted my pupils, I found her in labour of her third or fourth child, and reduced to extreme weakness by long fasting, as she had not been able to go abroad several days to beg in the streets. I immediately supplied her with some caudle, bread, and broth: but her stomach was so weak, that it could retain but very little; for, though I desired she should take it at first by cupfuls, she was so greedy of nourishment that she swallowed too much at once. However, she was afterwards restrained from doing herself an injury, and her stomach kept enough to recruit her strength, in some measure. I found the os uteri largely open, and the membranes broken, and the head at the upper part of the pelvis. I left one of the eldest pupils to manage the labour, advising him to persist in giving her nourishment, at proper times and in small quantity, and to let her lie mostly in bed, that she might enjoy some sleep and refreshment.

Indeed,

Indeed, when we first arrived, all of us were of opinion that she would expire; but in two hours her pulse raised, and her strength recruited, though she was still weak, and her pains seldom recurred. Thus she continued all night, sleeping between the pains; and when I called in the morning, I found the child's head advanced lower in the pelvis. I could then distinguish with my finger, the ear at the pubes; and by the fore part of it I discovered that the forehead was to the left side of the brim of the pelvis, and the occiput down at the lower part of the right ischium. I likewise perceived that the head was not large, because I could easily introduce my finger all round the lower part of it; and I felt the lambdoidal suture crossing the end of the sagittal on the right, and the fontanel higher up on the left side.

I left her again, after having desired the pupil to proceed in the same cautious manner, hoping, that as the patient was much recruited, the pains would grow stronger, and deliver the child.

Being called in the evening, and understanding that the pains were still weak, and the gossips uneasy, I examined in time of a pain, and found the head was lower, with the left ear turned to the left groin of the mother, the vertex pushed out, in the perinæum and parts adjacent, in form of a tumour, and nothing retarded the delivery but the weakness of the pains.

I waited an hour longer, encouraging the woman and her friends to exert their patience; but finding that after she had undergone several pains, the head did not advance, and that I could easily assist the labour, I placed her in the position chosen for lithotomy, and gently dilated the os externum with my fingers during every pain. When one was going off, I slipped up the fingers of my right hand to the os uteri, on the left side of the vagina, introduced one blade of the forceps between them and the head, turning the blade upwards towards the woman's groin, over the child's ear, holding it in an imaginary line with the scrobiculus cordis; then withdrawing my right hand, with which I took hold of the handle, I introduced the fingers of my left on the opposite side, but more backwards to the space betwixt the sacrum and ischium, where the other ear was situated, within the os uteri; and pressing the head against the blade that was introduced, so as to keep it in its place, I with my right hand insinuated the other blade in the same manner on the right side of the vagina. Having secured and locked them together, I waited for a pain, and then pulled gently; by which means the head advanced slowly and gradually. This operation I repeated during every pain; the os externum was gradually dilated, the child's forehead turned into the lower and back part of the pelvis, and the vertex came out below the os pubis. By this time the tumour occasioned by the distension of the external parts was become much larger, the perinæum was extended near three inches, the fundament stretched to two, and the parts between this and the coccyx much enlarged. The occiput coming out from below the os pubis, so as that I could, with my finger, feel the back part of the child's neck, I stood up, turned up the handles of the forceps, and gently moved from blade to blade, while at the same time I pressed the flat part of my hand upon the perinæum, to prevent its being lacerated. Thus I continued pulling upwards, by intervals, until the head was safely delivered; then taking off the forceps, the body was easily extracted.

While I was employed in tying the funis, some of the pupils observed, through the thin covering, that the woman's abdomen was still very big; and on examining in the vagina, I felt the membranes and waters of another child, which I brought by the feet, after the patient had taken some



wine and water, and recovered of the fatigue of the first delivery.—I used the forceps in this case, as a pair of artificial hands, to assist the delivery, because the pains were too weak to expel the child:

### CASES II. and III.

THE same year, I and my pupils attended another woman, in labour of her first child, who was reduced to a very weak and low condition by a tertian ague and extreme poverty. I was obliged to assist with the forceps, in the same manner as in the foregoing case; but the head was not so soon delivered, because the parts were more rigid. One of my female pupils first observed that the abdomen was very large after delivery; and I found there was a second child, which was likewise brought by the feet.

At another time, I was called to a woman who was taken in labour of her first child, and reduced to a very low state by violent floodings, with which she was seized in the beginning of labour. According to the midwife's report, I found the mouth of the womb open and backward, and the waters were not yet discharged. As the patient lost blood very fast, I introduced a finger into the os internum, and brought it forward toward the pubes, and this irritation produced a pain which pushed down the waters and membranes: these I tried to break; but not succeeding, I with two fingers pulled forward the os uteri a second time; and another pain ensuing, I slipped the point of my scissars between them, and as the child's head lay at a distance, easily snipped the membranes. The waters were immediately discharged in great quantity; and as the head came lower and locked up the parts, the flooding diminished, and in a little time entirely ceased. I then directed the woman to take a little broth frequently, and some wine and water, or caudle, until the broth could be made; and desired the attendants to give her two spoonfuls of the following mixture every now and then, as a cordial:—*Rx* Aq. cinnamon. simp.  $\mathfrak{z}\text{v}$ . Tinct. thebaic. gut. x. Syr. e meconio;  $\mathfrak{z}\text{ij}$ . M.

Her pulse being very low; the pains ceased for a considerable time; but by degrees she recovered from the extreme languor occasioned by loss of blood. As the discharge was stopped, I exhorted the woman to wait patiently for the efforts of nature, and ordered the midwife to keep her quiet, and continue to administer the broth by little and little, as her stomach could bear it, until the loss of blood should, in some measure, be supplied. At the same time, as she was inclined to doze, I desired that she might have no more of the cordial. These directions I left in the evening; and I was called again at six next morning, when the midwife told me the pains had returned soon after I left the patient, but were so weak, that although the child's head was come low down, it could not be delivered without assistance. Upon examination, I found the vertex at the os externum, and the back part of the neck at the pubes. The patient, though much recruited, being still weak and the pains languid, I directed the midwife to proceed in supporting her with the broth, and prescribed a cordial mixture, without any opiate, to amuse the woman and her friends.

I received another call at twelve, when I found things in the same condition; the pains being so feeble, that although the vertex was at the os externum, they had not force sufficient to propel it: I therefore began to dilate the os externum gradually during every pain, and moving her breech to the side of the bed, though, in consideration of her weakness, I let her

lie on her left side. I introduced the blades of the forceps, one after another, at each side, between the sacrum and ischium, moving them forwards over the ears of the child; and although I could not reach the os uteri with my fingers, yet they passed without much difficulty. When they were exactly opposite to each other, and in a line with the scrobiculus cordis, I managed them as in the two former cases, and delivered the head slowly.

#### C A S E IV.

**I** RECEIVED a message from a midwife, desiring me to prescribe some medicines to quicken the labour-pains in a woman whom she attended. As I was then engaged, and would not prescribe without being more fully informed of the patient's condition, I sent one of my elder pupils to receive a more perfect account from the midwife herself; who told him, that the poor woman had been three days in labour; but would not allow him to examine, though she earnestly requested my assistance.

As soon as I was disengaged, I accompanied him to the place, where I found this loquacious midwife extremely ignorant, without the least tincture of knowledge in her profession. When called to the patient, whose pains were just beginning in this her first labour, she had walked her about and fatigued her so much, that she was quite exhausted, and the pains had entirely ceased. She said she had done all that lay in her power to make room for the child, and that her fingers were swelled and painful with stretching the birth; but she could not inform me how long the waters had been discharged. Finding, upon examination, the head at the lower part of the pelvis, and the hairy scalp of the child, as well as the os externum of the mother, very much swelled, I ordered her to be put to bed, prescribed an anodyne mixture of *aq. fontan. 3v. tinct. thebaic. gut. xx.* sweetened with sugar, directed her to take two spoonfuls every half-hour, in order to procure sleep, and applied to the os externum a large pulstice of loaf-bread and milk, with hogs-lard. These steps were taken in the evening; and I was again called at three o'clock in the morning, when I went attended by my pupils, who were permitted to be present. The woman had enjoyed tolerable rest, and the pulstice being removed and the parts washed, we perceived the swelling was much abated. We therefore waited several hours, in expectation that the pains would increase, so as to dilate the os externum slowly, and effect the delivery. In this hope, however, we were disappointed; then I resolved to assist with the forceps, as the head was so low down; though it was so swelled, that I could not distinguish its position, for I could feel neither suture, ear, or back-part of the neck. Nevertheless, I concluded that as it was so low down, the ears would be to the sides of the pelvis, especially as the soft parts below were protruded by the head, yet not so much as to allow me to reach to the forehead, if backward, by introducing a finger in the rectum. However, I thought it highly probable that the forehead was backward toward the sacrum, rather than forward to the pubes; and, in this persuasion, I directed the woman to be laid on her back across the bed, with her breech a little over the side, her head being supported by the bolster and pillows, and two assistants holding asunder and supporting her legs. Then I introduced a blade of the forceps on each side of the head, and gradually assisting as in the foregoing case, delivered the woman without lacerating her parts, or even marking the child's head.

## C A S E V.

*Communicated in a letter by Mr. Puddecomb, at Lynn Regis.*

**H**E was called to a woman who had been two days and nights in labour, and very much fatigued. The pains had left her; and though the head presented at the upper part of the pelvis, he delivered her safely of a live child, whose head retained no impression or mark of the forceps.

## C A S E VI.

*Communicated in a letter from Mr. Jordan, Folkestone.*

**T**HE woman had been for a considerable time in strong labour, so that her face was excessively swelled, her eyes ready to start from her head, and she was hardly able to speak. The labia were very much tumified, the vertex presented, the head was low in the pelvis, and lay diagonal, the forehead being to the side of the sacrum, and the occiput at the mother's groin on the opposite side; in which situation it had continued for the space of five hours.

After having placed her in a supine posture, he introduced the forceps, and delivered her of a dead child. As she laboured under a dysuria from the tumefaction of the parts, cataplasms were applied, and in a few days carried off that complaint.

He likewise wrote that he had in the same manner delivered a young woman of a live child.

## C A S E VII.

*Communicated by Mr. Brookes, in a letter dated North Walsham.*

**T**HE woman had been long in labour, and the waters were discharged. The child's head was low in the pelvis, the forehead being toward the left ischium, but so strongly compressed that he could not raise it. He was therefore obliged to introduce the forceps diagonalwise, so that one blade was at the fore part of the ear, and the other at the back part of the other ear. After having turned the forehead backward into the hollow of the sacrum, he delivered the woman; and the midwife and all present were agreeably surpris'd when they heard the child cry, as they took it for granted, its life could not be saved.

Mr. Brookes says he did not use this method until after he had waited two hours, to see if, by dilating the parts, the child, which was the woman's first, could not be delivered by the labour-pains.

## N U M B. II. C A S E I.

FROM ANXIETY OF MIND.

**B**EING called to a patient, the midwife told me that the labour had gone on as well as she could desire; until an officious woman came in, and, in her hearing, said there was a fire in the neighbourhood. She was so much alarmed and affected at this report, that she was immediately seized with faintings and shiverings, and her pains in a manner ceased.

Upon examination, I found the head low in the pelvis, the back part of the neck being at the upper part of the pubes; from whence I concluded, that the forehead was turned to the concavity of the sacrum, and that the ears were at the sides of the pelvis, all the back and lower part of which was filled up with the parietal bones.



The patient being of a weak and lax habit, her pulse low, and her spirits depressed, I prescribed the following julep:—*Rx* Aq. cinnamom. simp.  $\text{ʒv}$ . Cinnamom. spirit.  $\text{ʒfs}$ . Tinct. castor. Sp. c. c.  $\bar{a}$  gut. xxx. Confect. cardiac  $\text{ʒfs}$ . Syr. croci.  $\text{ʒfs}$ . *M*. Of this she took two spoonfuls frequently; by which her strength was a little recruited, but her pains continued weak, and seldom recurred; and I plainly perceived, that the labour was retarded by nothing but the want of stronger efforts; for I knew the child was small, because I passed my fingers all around the head, which was not retracted after a pain.

I had placed her in a position betwixt sitting and lying, at the bed's foot; one woman being behind to hold up her head and shoulders, and two others on each side to support her legs, in hope that the weight of the child might assist the delivery; but finding, that although the head was so low, it did not advance, and having waited to no purpose for the effect of a great many successive pains, which I encouraged and endeavoured to increase by stretching every now and then the os externum with one or two fingers, I thought it would be the safest method, both for the mother and child, to assist as in the former cases of this collection.

Although a supine position would have better favoured the introduction of the forceps, yet, as the patient was weak, and the weather cold, I kept her on her left side, her breech being moved to the bed-side, and her knees up toward the abdomen, with a pillow between to keep them asunder.—Then insinuating two fingers of my right-hand between the sacrum and left ischium, to the inside of the os uteri, I with the other introduced one of the blades, turning it forward to the left ear of the child: now withdrawing my right-hand, with which I held this blade, until I pushed up the fingers of the left-hand at the other side, between the sacrum and right ischium to the os internum, I introduced the other blade, moving it forward over the right ear, and taking care as I went up to turn the handles of the forceps more and more backward. Finding the blades exactly opposite to each other, I locked them, and began to pull gently from blade to blade during every pain. As the head advanced and dilated the os externum, I with my right-hand turned the handles of the forceps more and more toward the os pubis, at the same time pressing the palm of my left-hand upon the perinæum, which was now pretty much distended. In a few pains the head was delivered, by moving the handles, with an half-round turn, towards the abdomen and between the thighs, while with the other hand I slipped back the perinæum over the forehead and face of the child. Then taking off the forceps, the body was delivered, and the placenta coming down was soon extracted.

### C A S E S II. and III.

**M**Y attendance was bespoke to a woman who lost her husband during her pregnancy. She was naturally of a weak and delicate habit of body; but her weakness was so much increased by the grief produced from this misfortune, that she looked like one starved by want of sleep, appetite, and digestion. When labour came on, I was afraid she would sink under it; for she fainted several times, and threw up every liquid or cordial that was given to support her.

I kept her constantly in bed; and as it was her first child, the os uteri was very slowly opened by the parts and membranes, which luckily did not break until this part and the vagina were fully dilated. As to the os externum,

externum, which I feared would not so easily yield, it was lubricated with pomatum, and I every now and then gradually stretched it with my fingers during a pain. When the membranes broke, a large quantity of waters were discharged; the child's head being small, soon came down to the os externum; the pains entirely ceased; she could now keep some broth on her stomach, lay a long time quiet and easy, and enjoyed some sleep; by which she was very much refreshed.

In about two hours after the waters ceased to flow, she was taken with some slight pains; by which the head was propelled in a slow manner, and pushed the external parts a little outward, though it had not force sufficient to dilate the os externum for delivery. After having waited in vain a considerable time, in hope that the pains would at last effect this dilatation, and the patient's strength beginning to fail again, I applied the forceps, and delivered her pretty much in the manner described in the foregoing case.

Shortly after, I was called to another woman by some of her neighbours, who told me it was not known that she was with child until she was in labour, when her mother had beaten, abused, and exasperated her to such a degree, that she had become frantic; and in her turn threshed the mother, midwife, and all present, who had at length locked her in a room by herself: they therefore begged I would visit her, and bring my pupils along with me.

We found her lying in bed, so fullen that she would not speak when the women told her they had brought several doctors to keep her in order. I examined as she lay; and feeling the child's head low in the pelvis, waited a long time for a pain, but to no purpose; she seemed to be afraid, and lay very quiet. Her breech being moved toward the bed-side, some of the gentlemen kept her in that position until I introduced the blades of the forceps as in the two last cases; with this difference, the forehead was backward, though toward the right side, that is, to the membranous part that fills up the empty space between the sacrum and ischium.

She lay quite calm and resigned while I introduced and placed the blades opposite to each other, and locked the handles firmly with a fillet, to prevent their slipping off the head, in case she should prove refractory; then, she having no pains, I pulled the head lower and lower, until the perinæum and fundament began to distend, when I turned the forehead more backward into the concavity of the sacrum and coccyx. I afterward pulled at intervals; and as the head advanced, and os externum stretched, I turned the handle of the forceps more and more toward the pubes, and delivered the head and body of the child as in the two former cases.

I have often been called, with my pupils, to the assistance of poor women, who were reduced to a sick and weakly condition by poverty and the want of the necessaries of life, as well as by being fatigued by midwives, who, to use the common phrase, had put them too soon upon labour. Many of these women have, by means of rest and nourishing things, recovered strength, and been delivered by the labour-pains; though sometimes, when the child's head was low down, and the pains so weak as to prove ineffectual, I have, as in the above cases, used the forceps, without doing any violence to mother or child.

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#### C A S E IV.

*Communicated by Mr. Ayre, of Boston, Lincolnshire.*

WHILE he attended my lectures, he was called to a woman, who, the day before, had complained of a head-ach, to which she had been sometimes subject. Early in the morning she was seized with convulsions, and

and lay insensible between the fits. He found the os uteri open to the breadth of a crown, and very thin; understood the membranes were broken; and the convulsions acted as labouring-pains. A small flooding beginning, he tried to assist by stretching the parts, which yielded with some difficulty; and the head being advanced, he delivered the child with the forceps, which had made a small impression, though without excoriation.

The woman continued insensible for three days, but had no fits after delivery, except a few that were slight in the evening; and she at length recovered. The child too, which was weak at first, did well.

### C A S E V.

A ROBUST young woman, in the ninth month of her pregnancy, was, without any apparent cause, suddenly seized with violent convulsions about six o'clock in the morning, after having complained all night of a head-ach, and sickness at her stomach, with vomiting; which, however, ceased when she was taken with convulsions. About ten o'clock I found her violently convulsed, and the os tincæ a little opened; as she had a florid complexion, and full pulse, twelve ounces of blood were immediately taken from her arm, a stimulating clyster was injected, and a cephalic julep prescribed; but notwithstanding these remedies, she continued convulsed, and quite insensible. Being called again by the midwife at eight o'clock, I found her extremely low, her pulse being scarce perceptible; and upon examination, I perceived the child's head was, by the violence of the convulsions, forced low down into the cavity of the pelvis, with the ear toward the os pubis, and the forehead turned to the os ilium on the left side.

The forceps being introduced in the manner described above, the woman was readily delivered, and the placenta, which firmly adhered to the fundus uteri, was afterwards brought away. She seemed easy after delivery, but her pulse was so low that it could not be felt, and she expired in about half an hour.

From all these circumstances, it plainly appears, that if the woman had been sooner delivered, she might have recovered, as well as the person mentioned in the former case.

## COLLECTION XXVI.

*Of difficult cases from the rigidity of the parts, circumvolutions of the funis, and contractions of the uterus, in which the forceps were used.*

### NUMB. I. CASE I.

#### FROM RIGIDITY.

I WAS called to a young unfortunate creature, about the age of fifteen, who was in labour. The membranes were broke before I arrived, and the os uteri, which was open to the breadth of half-a-crown, was very thin, but felt rigid in time of a pain.

Labour proceeded very slowly all night, and when I returned in the morning, I found the child's head low in the pelvis, and the vertex protruding



truding the parts below in form of a large tumour, but the os externum was so strait and rigid, that I could scarce introduce two fingers, and the pains were so strong, that I was afraid of a laceration. In order to prevent this, I, with the palm of my hand applied against the perinæum, restrained the force of the head, and when the pain went off, dilated the os externum by little and little. However, two hours elapsed before it was so opened as to admit all my fingers; which were so tired and cramped, that two of the pupils were obliged in their turns to assist in the same manner, and in about two hours more, it was so largely dilated, as to receive about one-third part of the child's head, that pushed out in a conical figure.

By this time the poor creature was very much fatigued, and the pains were become so languid, that there was no longer occasion to press the hand against the external part. Though we continued to encourage her, and support her with caudle and broth, that the parts might have time to dilate, she and they grew gradually weaker and weaker, and I began to be afraid that if assistance should be longer delayed, she might be in danger of her life, for she was every now and then attacked with fainting fits. When her pains began to grow languid, I had placed her in a posture betwixt sitting and lying, with her breech to the bed's-foot; so that, without altering her position, I applied the forceps, and with great difficulty delivered her of a child, whose head being large, was squeezed to a great length, but in a few days retrieved its round form.

The parts of the mother were so much inflamed, that for several days she laboured under much pain and difficulty of urine.

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### C A S E II.

**I**N the following year, my attendance was bespoke to a woman in her first pregnancy, turned of forty, and of a thin, though healthy constitution. The pains proceeded slowly, as in the former case; so that three days elapsed in a kind of lingering way, before the rupture of the membranes, which were pushed down in form of a long gut. The waters being discharged, the child's head, which was small, advanced downward, pushing before it the os uteri, which was not enough dilated to allow it to pass. This I kept up during every pain, stretching it with my fingers, until I slipped it all round over the head. As the os externum, in the former case, had given me so much trouble, I now began in time to dilate it during every pain; and succeeding so well, that I was in hope the head would not be long retained after its arrival at that part. I found this precaution was right, for the woman had been so much and so long fatigued before the os uteri and vagina were sufficiently distended, that when the head came down and pushed out the external parts, her strength and patience were almost exhausted; nevertheless, by amusing and encouraging her, she exerted her courage and fortitude for two hours longer, though to very little purpose. At last, perceiving the pains were too weak to force down the head, and dilate the parts so as to let it pass, though about one-fourth part of it was already protruded through the os externum; observing these circumstances, I say, I tried to introduce the whalebone fillet, described in my Treatise, and alledged it to be an excellent contrivance for helping along the head in such cases. This I endeavoured to insinuate betwixt the child's head and sacrum of the mother; but as it could not be properly

fixed

fixed over the chin, I withdrew it, and applying the forceps along the ears at the sides of the pelvis, assisted the delivery as in the former case.

The child was large, and the head being compressed into a lengthened form, produced convulsions, of which, however, it recovered, in consequence of my allowing the funis to bleed a little.

### N U M B. II. C A S E I.

FROM CIRCUMVOLUTIONS OF THE FUNIS, OR CONTRACTIONS OF THE UTERUS.

**O**NE of the poor women attended by my pupils was taken in labour; which went on in the common way. The membranes and waters pushing down opened the os externum; and when they broke, the head came down to the middle of the pelvis; but when propelled a little farther by two or three successive pains, it returned to the same place, and continued to advance and retreat in this manner for the space of several hours; so that the woman was much fatigued, and the pains became weaker and less frequent. As this difficulty neither proceeded from the large size of the head nor the narrowness of the pelvis, I concluded it must be owing to the funis rather than to the contraction of the uterus before the shoulders; because this contraction of the head happened immediately after the rupture of the membranes, and before all the waters were evacuated; and I was certain that it could not be occasioned by the expansion which happens in the abdomen of a dead child, because I plainly felt it alive by the motion of its head.

Thus convinced, I directed the patient to be placed in a posture between sitting and lying; which I imagined might assist the delivery. When the head was forced down in time of a pain, I introduced a finger into the rectum, and tried to keep down the head; but could not reach so high up as the forehead, which was to the right side of the sacrum. I then, during every pain, gradually opened the os externum, which easily yielded, the woman having had children before, and introducing a blade of the forceps along each ear, that is, one at the left side of the sacrum and the other at the right groin, I locked them together; so that when the pain recurred I could keep the head down, and prevent its being retracted. In the time of the next pain I brought it lower, and turned the forehead into the hollow of the sacrum; and in two pains more it was advanced to the lower part of the coccyx. When it was in this situation, I introduced two fingers into the rectum to keep it down; but it being still too high up, I, during the next pain, brought it lower; when, finding I could command the head by pressing my fingers against the sinciput at the root of the nose, I took off the forceps with my other hand, and helped the head along in the manner described in the lingering cases. The funis being thirty inches in length, was twice circumvolved round the neck, and once round the arm.

### C A S E S II. III. IV. and V.

**I** ATTENDED a private patient, who had been very much weakened by flooding from time to time. The membranes broke, and the labour proceeded tolerably well; but when the head came low down, it was drawn back after every pain, as in the former case. Having fixed the forceps, I brought the forehead down below the coccyx; but as her pains were weak, and this was her first child, I kept on the instrument until one-third of the head

head was without the os externum; and I found I could easily keep down the head by pressing my fingers against the external parts on each side of the coccyx. After having taken off the forceps, I, during each succeeding pain, pressed the head upward with that hand, while with the fingers of the other I slipped the os externum over the child's head. The funis was uncommonly short, and once round the neck.

At three in the morning I was called to a woman in labour, by a midwife, who told me the waters had been discharged two days, even before the os uteri was much opened; that after this discharge the pains were lingering, and some part of the waters continued to dribble until the evening before I was called; when the head came lower down; but now it was after every pain drawn back out of reach, and the pains were grown much stronger. I took the proper opportunity of examining, and found the head propelled to the middle of the pelvis by every pain; after which it was drawn back to the upper part.

After having seen her undergo several strong pains; by which the head was not at all advanced, I easily introduced my hand into the vagina of the patient, who had borne several children; and as the pain abated, raised the head so high above the brim of the pelvis, that I could pass my right-hand flattened along the left side, and over the forehead and face of the child, where I found the lower part of the uterus strongly contracted. I continued to push farther up and dilate the part, so as to be able to bring the child by the feet; but finding this expedient impracticable from the force of the contraction, I withdrew my hand in the beginning of a pain, and the child's head was immediately forced down to the os externum, though it was afterwards retracted to the middle of the vagina. However, having succeeded so far, I waited for the effect of several pains, which I hoped would force the head lower down, now that it had made such progress; but finding my expectation disappointed, and knowing it would be an easy task to assist the delivery, I had recourse to the forceps. One ear of the child being to the pubes and the other to the sacrum, and the woman lying on her left side; I would not alter her position, but brought her breech to the bed-side, and moved her head to the upper and back part of it; then sitting in a low chair behind the patient, the forceps being privately disposed, I easily introduced the fingers of my right-hand to the os uteri, between the pubes and head of the child, which was small, and insinuated one blade of the forceps gently, that I might not hurt the bladder; then I introduced the other blade upon my left-hand, between the other side of the child's head and the sacrum, carefully turning back the handle in order to humour its curve; and being certain that the instrument was well fixed, pulled gently from blade to blade, and kept the head from being retracted as the pain abated. I continued to assist in this manner during every pain, until the occiput was brought to the lower part of the right ischium; then turning the forehead into the concave part of the sacrum, the occiput came out from below the pubes, and the head was slowly delivered.

We had a public case of this nature, at which my pupils attended. The waters had been long discharged before the head was forced into the pelvis, and we managed the labour in the cautious manner described above; yet after I had dilated the parts, and applied the forceps; I could not, by repeated trials, bring the head through the os externum. Being assured from experience, that the obstruction proceeded either from the contraction of the uterus or the detention of one shoulder above the pubes, and not from a tumefaction of the abdomen, because I felt the pulsation, though very



weak, at the fontanel, I disengaged the instrument, and, raising the head again, found the difficulty was owing to the left shoulder being over the pubes. As the woman lay on her back, I introduced my right-hand, but could neither force the shoulders to the right side of the pelvis, nor push the child farther up, so as to bring it by the feet, though the head was not large. I then withdrawing my right, introduced my left-hand on the other side, and raising the head, tried again to push up at the anterior parts of the child, so as to reach the feet; but failed once more from the strong contraction of the uterus. However, getting hold of the left arm, I brought it down; and as I withdrew my hand, the head followed to the os externum and lower part of the pelvis. I turned the right-arm to the right side of the sacrum, the pains being weak, again fixed the forceps, which I moved in a proper manner; and pulling gently at the hand, delivered the head, which was followed by the body.

I was called by a midwife to a woman who had been many hours in labour, and found, that after the discharge of the waters, the head was forced low down by every pain, but afterwards drawn up again. I was likewise informed, that formerly she used to have large children and quick labours. Encouraged by this intimation, I tried to turn the child, but was prevented by the strong contraction of the uterus; but in making this trial, and raising the head, I not only found the funis surrounding the neck, but likewise the uterus contracted before the shoulders. This last I dilated with my fingers as much as possible; then withdrawing my hand, applied the forceps and delivered the child, which had been dead for some days. The funis was three times round the neck, being much tumified, and of a livid colour.

## COLLECTION XXVII.

*Of laborious cases, occasioned by the large size of the child's head, the narrowness or distortion of the pelvis, when the head is low and delivered with the forceps.*

[Vide Part. i. Book iii. Chap. 3.]

### NUMB. I. CASES I. II. and III.

#### FROM THE LARGE SIZE OF THE CHILD.

**M**Y attendance was bespoke to a woman who had lost her first child in consequence of its large size. This second labour went on in the usual way, until the os uteri was largely opened by the waters and membranes, which breaking, the vertex advanced to near the middle of the pelvis; then the pains ceased for about two hours; during which the patient lay easy, and enjoyed some sleep. After this intermission, a pain began to recur every now and then; and a good deal of water being discharged, they returned strong and frequent; as for the patient, whose constitution was weak, I kept her mostly in bed.

The parietal bones began to ride each other, the hairy scalp became loose and wrinkled, and the head was gradually and slowly squeezed down to the lower part of the pelvis, where it remained for a considerable time. The occiput was strongly pressed against the lower part of the right ischium, the fontanel being at the upper part of the left; but the head was squeezed to

to great a length, and so firmly compressed against the inside of the pubes, that I could not reach the ear with my finger.

After many strong pains, the patient's strength and spirits began to flag; and both she and the friends became apprehensive that this child also would be lost, notwithstanding the encouragement I gave, by telling them, that I had delivered many women of live children after they had been much longer in labour. The force of the pains was by this time abated; yet every now and then she was taken with one stronger, that forced the head a little lower, so that I could feel the child's left ear toward the left groin of the mother. At length the patient being still more sunk, and perceiving no farther advance toward delivery, I introduced the forceps as she lay on her side; and during every pain tried to bring the head lower, and turn the forehead backward to the sacrum. But in this attempt the instrument began to slip, so that I was obliged to unlock the blades, and move each upward again over the ears; the handles being fixed and tied with a garter, I turned the patient on her back, and directed an assistant on each side to support the legs; matters being thus disposed, I waited for a pain, and gradually delivered her as in former cases. The child, whose head was squeezed into a lengthened form, seemed at first to be in a convulsion, but soon recovered in consequence of my letting the funis discharge about two or three spoonfuls of blood.

I was called by a midwife to a case resembling the former, and tried the whalebone fillet (*vide* tab. xxxviii.) which I could not get over the chin; so that finding the principal hold was on the face, I withdrew it, and waiting some time until the patient and the pains grew weaker, I applied the forceps, with which I delivered, as in the other cases of this collection. My reason for withdrawing the fillet, was because I durst not venture to exert so much force as was requisite for delivery, lest the part of which I laid hold should have been galled to the bone; for I knew one instance in which the fillet had been used, and actually scalped the child; and another, in which the child's under-jaw had been cut to the bone by the force of pulling.

In the course of the same year, being called to a woman, who, according to the midwife's report, had been three days in labour, I found the child's head at the lower part of the pelvis, and a large tumour on the vertex, protruded without the os externum. She had been in a slow kind of labour all Saturday and part of Sunday, when the membranes breaking, the pains became strong, and continued so all Sunday night; by these the head had been pushed down, but did not advance farther than the situation in which I found it on Monday night.

The patient was much exhausted by fatigue and the length of the labour. Her pains being languid, I prescribed a cordial mixture, with confection cardiac, and slowly dilated the os externum during every pain. By these efforts the pains grew stronger, and I expected the head would soon be delivered. But being disappointed in my hope, I thought it was pity the woman should be kept any longer in such a disagreeable way; and as she lay on her left side, I endeavoured to raise the head, so as to know its position. I failed, however, in my attempt, and there was no room for introducing a finger or two to feel either the neck or ear at the pubes; though, as the head was so low down, I thought it was probable that the ears were to the sides of the pelvis. I then directed her to be turned on her back, and supported by assistants, as the patient in the former case; and sat down with a resolution to deliver, either with the forceps or erotchet, in order to save the

the woman's life; though I determined to try the forceps first, that the child also, if possible, might be saved. As the head, which was compressed into a great length, filled up all the lower part of the pelvis, so that I could not introduce my fingers to guide the blades of the forceps on the inside of the os uteri, I attempted to introduce them several times, until I was certain that they were safely past this place, and not on the outside of the os tincæ. Being convinced that I had so far gained my point, I began to bring the head lower during every pain; and at last delivered the woman of a dead child, whose head was squeezed to a great length.

#### C A S E IV.

A WOMAN, in labour of her first child, had undergone lingering pains all Sunday night, and I was called next morning at seven. But the pains being inconsiderable, the membranes unbroken, and the patient reserved, I was not allowed to examine until ten, when the pains grew stronger. Introducing my finger into the vagina, I felt the rectum full of indurated fæces, the os uteri soft, thin, and pretty open, the waters pushing down the membranes; and when the pains went off, the child's head resting against the upper part of the pubes.

I immediately prescribed a clyster, which operated to satisfaction; and as she had enjoyed some sleep in the fore-part of the night, I desired the night rise until the bed could be prepared before labour should be far advanced. Every thing proceeded in an easy and slow manner, and she took her pains in an easy chair, till about twelve, when she was pretty much fatigued. I then directed her to take some pains on the bed, and now felt the os uteri largely opened, the membranes pushed down large and full to the os externum; but the head was not at all advanced.

Judging from this circumstance that it was large, I would not allow her to be put in naked bed too soon, because if, after the rupture of the membranes, the head should not come down without difficulty, it might be necessary to assist the delivery by different positions; and in the mean time, as the pains were strong and frequent, I directed them to get ready cloths to receive the waters as she lay on her side, for I now expected that the membranes would soon give way. Accordingly the waters were in a little time discharged; but perceiving that the pains soon after abated, and the head did not advance, I allowed her to rise and walk about; and she took her pains sometimes in a standing and sometimes in a sitting position; though, in order to prevent her being fatigued, she every now and then rested on the bed, half sitting and half lying. By these means the pains increased, and at two next morning, the head was advanced to the os externum and lower part of the pelvis. That it might not be detained too long in this situation, I began to dilate the os externum a little during every pain; and these efforts kept up the pains, which were become languid, in consequence of the fatigue sustained by the patient. The head was not at all advanced farther at four o'clock, when I plainly felt the occiput strongly pressed against the lower part of the left ischium, the parietal bones riding one another, the head, which was large, squeezed to a great length, and one of the ears at the pubes. Perceiving the pains were not strong enough to push the head farther, so as that the occiput might rise from the ischium to the space below the pubes, and the forehead turned back into the hollow of the os sacrum; and knowing that I could easily assist and alter the position with the forceps, I thought it was pity that the mother and child should



should run any farther risk; and ordering her to be put in bed naked, I applied the instrument, and delivered the child, as in col. xxvi. No. ii. case iii.

### CASES V. and VI.

A WOMAN had been in labour of her second child, for many hours after the os uteri was largely opened, and the membranes had broken, and the midwife had assured the friends, that the head would be delivered by each successive pain. At length, however, the patient's strength beginning to fail, they sent for me at three in the morning, when I found the child's head low down, pushing out the parts in form of a large tumour, and the scalp very much tumified. After having tried in vain to assist the birth by gently dilating the os externum during several pains, I directed the patient to be put in a supine posture, and as she was very weak, sat down with a resolution to deliver either with the forceps or crotchet; for I found it was wrong, as well as impracticable, to bring the child by the feet. The head was so large, and compressed into such a lengthened form, that I could not push up my finger at the pubes, to feel the ear or neck; neither could I distinguish the situation of the head by the sutures, because the scalp was so much swelled; nor could I move the head upward, in order to feel the upper parts, such as the ear, neck, or face. But supposing, from the touch of the lower part of the head, that one part pressed more against the left ischium than the right, I concluded that the forehead was at the right side of the sacrum, and the occiput stopped between the ischium and groin. In this persuasion, I introduced one blade between the child's head and the mother's right groin, and the other at the left side of the sacrum, along the ears; then locking the handles, I tried to turn the forehead more backward, but could not, until I had pulled the head a little lower, when I delivered, as in col. xxvi. No. ii. case i.

In the following month, my assistance was solicited in a case of pretty much the same nature.—The woman was greatly fatigued and exhausted with labour, the child's head was compressed to a vast length, and so puffed, that I could not distinguish its true position; nor could I raise it so as to examine higher up. Nevertheless, as it was very low, I supposed that the ears were toward the sides of the pelvis; and having laid her in a supine posture, I introduced the forceps, insinuating one blade on each side, as usual. But the head stuck so fast I could not move it lower; then I attempted to turn it to the right side of the sacrum, imagining the forehead might be to the left, as I had mostly found it; yet here also failing in my endeavours, I turned the other way, when it yielded with great ease, and the vertex coming out below the pubes, the head was brought along, and delivered without farther difficulty. One blade of the forceps was fixed before the left ear, and over the temple of that side, and the other behind the right ear and lower jaw; the impression was deeper than usual, but not such as to do any injury to the child.

N. B. In the two former cases, I first of all tried to move the occiput downward, and turn the forehead back to the sacrum, with one blade of the forceps.

### NUMB. II. CASES I. and II.

FROM A SMALL OR DISTORTED PELVIS, WHEN THE CHILD'S HEAD IS LOW.

MY attendance was bespoke to a woman who had before lost a child, which was supposed to have been too large to pass through the pelvis; for

for she was of a small make and stature.—She was taken in labour when I happened to be engaged, so that I was obliged to send a midwife to attend her; and before I could see her, the membranes were broken, the os uteri was largely open, and the head squeezed into the middle of the pelvis, in form of a cone or sugar-loaf.

The midwife had kept her mostly in bed to prevent her being fatigued, and I advised her to continue in the same situation, until she complained of being weary of that position, and of violent cramps in her limbs. Then getting up, she walked about the room, and took her pains sometimes standing and sometimes sitting; though I desired she would not fatigue herself by walking or standing too long, nor force down, except when the pains were strong. In this cautious manner she was managed all night, during which she rested at intervals upon the bed, until she was compelled to rise by the violence of the cramps that seized her as she lay; and as I examined every now and then, I found the head advance by little and little, every third or fourth pain, which was stronger than the rest. At six in the morning, the vertex was pressed down to the lower part of the pelvis, below the right ischium; but at eight it had made no farther progress, though it was squeezed to a great length, and the parietal bones rode one another. By this time the patient was very much fatigued, her pains were become weaker, and at small intervals she was subject to retchings, which, however, supplied the defect in the labour-pains, by forcing the head so low as to protrude the perinæum and adjacent parts, in form of a large tumour. I waited some time, in hope that this extraordinary assistance would deliver the child; but the patient being suddenly seized with a fainting fit, I thought it was high time to have recourse to a more effectual expedient; and the child's left ear being to her left groin, and the forehead at the left side of the sacrum, I moved her breech to the bed-side as she lay on her left side, introduced the forceps along the ears, as in collect. xxv. No. ii. case i. and in that manner safely delivered the woman of a live child, which had been retarded by the smallness of the pelvis, though it was not at all distorted.

I was afterward called by a midwife to a woman of a small stature, about ten in the morning, when I found the vertex at the lower part of the left ischium, and the head squeezed into a longitudinal form, as in the preceding case; as for the waters, they had been draining off for some time before I arrived.

The patient being pretty much exhausted, was put in bed; and as she had been seized with a looseness at the beginning of labour, and enjoyed no sleep the preceding night, I prescribed an anodyne mixture of tinct. thebaic. gut. xv. & syr. c meconio iij. in aq. simp. 3vss. of which she took two spoonfuls immediately, to be repeated occasionally until rest should be procured.

This prescription had the desired effect; and next morning about eight, I was called, and informed, that although the pains had been stronger, the head was very little advanced. I now felt the vertex had made some progress; the occiput was turned below the pubes, and the forehead to the sacrum, though not so low as that I could assist with my fingers in the rectum or at the sides of the os coccygis. The pains were likewise become weaker, and the patient's strength began again to fail. The child's ears being by this time to the sides of the pelvis, and nothing wanted but pains to promote the birth, I directed her to be placed in a supine position on the bed, and with the forceps delivered her of a dead child.

## C A S E III.

I WAS called by a midwife to a woman who had been sickly from her infancy, and very much distorted. The membranes had been broken, and the waters discharged several days before she was in labour, and the midwife, who had attended her since the preceding morning, assured me she had been in strong labour for four-and-twenty hours. I found the vertex presenting, the mouth of the womb fully opened, and the head down to the lower part of the pelvis; but when I introduced a finger betwixt it and the pubes, I could not reach so high as to feel the ear, nor could I distinguish by the sutures, the right situation of the head. Nevertheless, the patient being weak and low, I directed her to be laid across the bed, in a supine position, and introducing the forceps at random, by the sides of the pelvis, tried by gentle efforts, during every pain, to bring the head lower down; but finding I could not move it without using such violence as might be prejudicial to the mother and child, I withdrew the instrument, and resolved to wait a little longer, and as the patient had slept but very little for two nights, and was much fatigued, I prescribed an anodyne draught, by which she procured rest, and was refreshed. Then the pains returning, and forcing down the head, so as to protrude the external parts, I received another call, and found the back part of the neck at the pubes: from this circumstance, I knew the forehead was in the hollow of the sacrum, and that the ears were to the sides of the pelvis; I therefore, after having allowed her to take a few pains, which were weak, considered, that as the head was low down, the assistance of the forceps might prove effectual in helping it along; so having placed her in the position described above, I introduced them along the ears of the child, and by pulling gently every pain, delivered the head, which was squeezed to a great length; but the os externum was so rigid, that half an hour elapsed before it could be dilated so as to let the head pass without laceration.

After delivery, I introduced my finger into the vagina, and found the pelvis so distorted, from the jutting forward of the upper part of the sacrum, that had the child been large, its life could not possibly have been saved. The head was of a lengthened form, and contorted to one side, and there was a deep impression above the ear. The forceps too, when first fixed, had impressed the forehead, though the mark disappeared in five or six days: but they made a very inconsiderable impression when they were fixed the second time along the ears.

## C A S E S IV. and V.

A MIDWIFE called me to a woman, whom she had formerly delivered of a dead child, and she said she had, on that occasion, felt an uncommon bump backward. When I examined her, the membranes were broken, and the child's head was sunk down to the middle of the pelvis, where it was retarded by a jutting in at the middle of the sacrum; for, instead of feeling it concave, I found a prominence, as if one of the bones in the middle had been pushed before the rest; and the vertex of the child seemed to be pressed down in a flattened form, by the woman's pains, which were strong and frequent.

I was called about three in the morning, and prescribed some innocent things to amuse the patient and her friends, who were extremely anxious, and went away, after having desired that she might not be hurried about or fatigued. I received another summons about nine, when I found the



vertex squeezed down to the lower part of the pelvis, the woman exhausted, and her pains abated. As I at that time imagined, with others, that in labours the forehead was mostly to the sacrum, and the ears to the sides, I caused the patient to be laid across the bed on her back, as in collect. xxv. No. i. case i. and applying the forceps along the head, at the sides of the pelvis, tried, during every pain, to help it along, that the child might not be lost. As the resistance was great, I gradually increased the force, and though the forceps slipped several times, I at last delivered the head, by grasping the handles more firmly, and pulling up toward the pubes. But the perinæum was torn by the sudden delivery; because I did not then know how to make the proper turns, and proceeded in the slow and cautious manner which I have since adopted. The child's head was squeezed into a longitudinal form, flattened on the sides, with a deep impression on the cranium above the ears, and from an indention on the os frontis, by a blade of the forceps, which had been fixed on that and the occiput, I discovered that the ears were not to the sides as I had imagined. These impressions had very much galled and inflamed the parts; but, in consequence of proper care, they digested, and the child recovered; and as he grew up, the marks diminished and disappeared. I told the midwife and nurse, that the patient's perinæum was cracked, and desired they would not make her uneasy, by informing her of an accident which would be attended with no bad consequences. Accordingly, the parts were perfectly healed in the space of twenty days.

A midwife demanded my assistance in behalf of a woman, whom she had once before delivered, with difficulty, of a dead child, in the eighth month. In this labour, the membranes were no sooner broke, than I received a call, and found the pains strong, the child's head advanced to the middle of the pelvis, and the vertex gradually descended to the lower part of the ischia, which seemed remarkably near to one another. The head being luckily small, and the occiput to the left ischium, I resolved, after having waited a considerable time, to turn the forehead backward to the os sacrum, on the supposition that the narrow part of the head would more readily pass between the ischia. Thus determined, I kept the patient on her side, and applied one blade of the forceps at the pubes, and the other at the sacrum, along the child's ears, and with great difficulty turned the forehead to the sacrum; but before I could deliver the head, I was obliged to alter their position, fixing one behind the left ear, and the other before the right ear, backward, at the right side of the sacrum.

I attended in another case of this kind, in which I was obliged to open the child's head, on account of its large size:

#### CASES VI. and VII.

*Communicated by Mr. J——, of G——.*

THE membranes had been broken, and the woman in strong labour for more than twenty hours, and was weak from being over fatigued. After she had taken a few pains, he found the head did not advance, and considered, that although it was high, yet it might be dangerous to wait longer, on account of the patient's weak condition. In pushing up his hand into the vagina, he found one ear backward, and above the upper part of the sacrum, which projected considerably forward with the last vertebra of the loins. The head felt also very large, and the forehead was to the right side; he introduced the blades of the short forceps, that were covered with

leather;

leather; but being afraid that the handles were too short, he brought these out, and introduced a longer kind uncovered, which was the kind he had used when he attended me. After he had fixed these properly; he tried several times in vain to bring the head lower. Upon which he resolved to give up that method, and open the head. Finding, however, that the forceps did not slip, but kept a firm hold, he resolved to try and make one effort more; and after pulling with all his strength, and moving the handles of the forceps over the pubes, he got the head delivered, yet not without bending backward that blade of the forceps that was next to the pubes. She was delivered of a dead child about noon. In the evening she seemed to be in a good way, and in a breathing sweat. Next morning she was attacked with a violent looseness, which he restrained with opiates; but that evening she was comatous, and expired next morning. He supposed the last bad symptom was occasioned by their giving her, without his knowledge, half a pint of rum at two draughts.

As he desired my opinion of this melancholy case, I wrote him the following letter, with another case of the same kind:—

“ S I R,

“ I received your's, which I ought to have answered before this time. Since you attended me, I contrived the last forceps with shorter handles, on purpose that too great force might not be used; and when they are not sufficient, I would then open the head, and extract with the crotchet. No doubt I should perhaps have been tempted even to use as great force as you did, when there was so good a hold; but yet you may consider how much the soft parts of a woman must suffer, by the bending so strong an instrument against them as the blade you sent me. If you had been sooner called, to prevent the woman being over-fatigued till the head came lower, there might have been a chance for saving the child. When the pelvis is narrow, and the head large, and so high that you cannot, or dare not, turn the child, and the woman in danger from extreme weakness, it is right first to try the forceps; but when you find it will not come along with a moderate force, the crotchet must be used, for we ought never to endanger the life of the mother to save the child.”

I had a case of the same kind some time ago, but not so difficult as your's. The membranes were broken many hours, and the head was forced in the middle of the pelvis. Mr. M——rd was sent for, and tried the forceps; but having no assistants to hold the woman firm, did not succeed: then he sent for me, and I was allowed to carry along with me four pupils. The ears were to the pubes and sacrum, the forehead to the left side, and the upper part of the os sacrum jutted in forward. As I could not turn the forehead with my hand a little backward, or part the blade of the forceps along the ear at that part, I introduced it behind the ear at the side of the os sacrum, and the other at the fore part of the pelvis toward the left groin, and before the other ear, so that the forceps was fixed diagonally on the head, and the same as to the pelvis. I used a good deal of force, by which I delivered the head, taking care to make the several turns in extracting it. The child had been dead many hours, the head was large, and squeezed of a very long figure, and the parts of the woman very much swelled. She was attacked with a violent looseness, which was restrained by proper remedies, and she recovered slowly. When the parts are inflamed, and much swelled, the lochia sometimes are obstructed, and fall upon the intestines; especially if the patient has been exhausted by a tedious labour.

## C A S E S VIII. and IX.

*Communicated in a letter from Mr. Ayre, of Boston, Lincolnshire.*

THE labour went on in a slow manner, and, by waiting patiently, the head, after many severe pains, was forced down into the pelvis. As the woman lay on her side, he introduced one blade at the pubes, and the other at the sacrum, and pulled with considerable force during every pain; but the forceps slipping, he was obliged to introduce them again as before; and, giving the forehead a turn backward, the child was, in two pains more, delivered. He sent two other cases in women who had been long in labour in their first children; the ears were toward the pubes and sacrum, and one of the women was very fat, and about forty. He delivered both cases safely with the forceps, after finding the pains were going off and the patients turning weak.

I had a case from L——, by which the gentleman seems to have been too much in a hurry. After using great force, he delivered the child, which was alive; but the head was too much galled with the blades, and the woman was carried off in a few days by a purging. In another case, the same gentleman tried to deliver with the forceps when the vertex presented, and the forehead was to the pubes; as he was not able to raise the head so as to turn the forehead backward, he pulled it along as it presented; finding, that as the vertex pushed out the perinæum, it was beginning to tear, he took off the forceps; and the head was afterwards delivered with the labour-pains, and both mother and child did well.

## COLLECTION XXVIII.

*Laborious cases, in which the vertex presenting with the forehead to the pubes or groin, the patient was delivered with the forceps.*

[Vide Part i. Book iii. Sect. iv. Chap. iii. N<sup>o</sup> ii. and Tab. xxi.]

## C A S E I.

I WAS called to a woman who had been long in labour after the membranes were broken. I found the vertex was down to the lower part of the pelvis; but the scalp being much tumified, I could not distinguish by the futures the real position of the head. The woman being much exhausted, the pains weak, and the head low, I thought it was proper to assist the delivery, to prevent her and the child from being in danger. For that end, I caused her to be placed in a supine position, as in col. xxv. No. i. case i. I then, during every pain, dilated the os externum, raised the head above the brim of the pelvis, and introduced my fingers and hand flattened betwixt the head and sacrum, where I felt the back part of the neck, which informed me that the forehead was to the pubes. Considering that the difficulty or obstruction of the delivery proceeded only from the wrong position of the head, I first tried to turn the forehead toward the back part of the pelvis, and, failing in the attempt from the slippiness of the same, I endeavoured to bring the child footling; failing in this effort also, from the strong contraction of the uterus, I withdrew my hand, and



and applying the forceps along the ears, used a good deal of force to extract the head as it presented. I brought it so low that I felt the fontanel one inch or more below the pubes; but could not bring it farther unless I had torn the vertex through the perinæum and anus, which were now greatly stretched. Then I disengaged and brought down the forceps, and introduced a blunt-hook, that had a round button on the end for that purpose, up along the side of the head and above the chin. With this hold, I pulled down the forehead and face below the pubes, and then delivered the child. This was, at that time, the common method when the head was large, and squeezed to such a length as to prevent the forehead coming out, either with strong labour or the forceps; but the bad consequences that might ensue both to mother and child, made me afraid to continue in this method of practice. For the perinæum was commonly tore, and that part of the child was sometimes so much bruised as to produce a violent inflammation, which destroyed the child; but a lucky incident which happened the year following, gave me the hint of a better method, as in the following case.

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*C A S E II.*

**A** MIDWIFE called me to a woman in the morning, who had been most of the night in strong labour. I felt the vertex at the lower right side of the sacrum. Her pains were still pretty strong, although she had lost, both before and after the membranes were broken, a large quantity of blood. I found also the fontanel at the left groin, which assured me that the delay of the delivery proceeded from the forehead being at that part. The patient being placed as in collect. xxv. No. i. case i. I introduced the forceps along the ears, holding the handles, when fixed, toward the vertex, which was to the right side of the os coccygis. Then I began to pull from side to side; by which means the head advanced a little, but not so much as to allow the forehead to turn out below the pubes. In repeating these efforts, the forceps slipped off three times; though I did not observe, till afterwards, that one of the blades, by giving way, was the occasion of their slipping off the head. As I found I could not deliver the head, by pulling either downward to bring out the forehead, or upward, because the head would not yield that way on account of the chin being pressed against the breast, neither did I choose to try the blunt-hook, because of the bad consequences attending that method. I was also averse and loth to destroy the child by opening the head. While I paused a little, considering what method I should take, I luckily thought of trying to raise the head with the forceps, and turn the forehead to the left side at the brim of the pelvis where it was widest, an expedient which I immediately executed with greater ease than I expected. I then brought down the vertex to the right ischium, turned it below the pubes, and the forehead into the hollow of the sacrum; and safely delivered the head, by pulling it up from the perinæum and over the pubes. This method succeeding so well, gave me great joy, and was the first hint, in consequence of which I deviated from the common method of pulling forcibly along and fixing the forceps at random on the head; my eyes were now opened to a new field of improvement on the method of using the forceps in this position, as well as in all others that happen when the head presents.

## C A S E III.

**I** ATTENDED, with my pupils, one of our women in Drury-lane; the membranes had broken in the evening, and she had frequent and strong pains all night. When they sent for me in the morning, I felt something like the vertex down at the lower part of the pelvis; and she was much in the same condition as the woman described in collect. xxv. No. i. case i. But we were all mistaken as to the position of the head; for I, as well as the pupils, imagined, that, as the head was so low, the forehead must be turned back to the lower part of the sacrum; and that, on account of the head being squeezed to a great length, we could find neither neck nor ear at the pubes. We were likewise mistaken as to the sutures, supposing what was called by the ancients the back fontanel, where the lambdoidal crosses the end of the sagittal, was the fore fontanel, which was backward toward the sacrum. I told all present, that as the head was so low down, and the delivery retarded by the weakness of the pains, it was safer for both woman and child to deliver her with the forceps; especially as I was pretty certain of succeeding without doing injury to either, being confident, as she had formerly quick and easy labours, that the impediment proceeded only from weakness, and perhaps a larger child than usual, which might be in danger of being lost by longer delay. I had her then put in the same position, and applied the forceps in the same manner, as in the forementioned case. I then pulled gently every pain, and the woman being exposed to show the operation, I was surprized to see what I imagined the occiput come along from under the pubes, not with hair, but bald and smooth. Introducing my finger, I now plainly perceived that we had all mistaken as to the position; for I felt the root of the nose and eye-brows within the pubes. As the head was now so far advanced, I thought it would be better first to try to bring it along in that manner; therefore I continued to pull along gently, but instead of pulling upward as before, to raise the head from below the os pubis, I pulled downward, to bring the forehead and face out from below that bone; they accordingly slipped out gradually, and when the chin was delivered from below the pubes, I turned up the handles of the forceps toward the face, pulled the head upward, and delivered it according to the directions laid down in those cases where the face presents. *Vide col. xxx. No. ii. case i.* The woman was not tore; the child's head was squeezed to a great length, but was neither hurt nor marked with the forceps.

## C A S E IV.

**A** MIDWIFE called me to assist her with a patient, and informed me that she had delivered the woman several times, and her labours were commonly tedious from her having large children; but that this was worse and more tedious than any of the former; for although the waters were a long time come off, and the head had been low in the basin for many hours, so that she expected every pain would deliver the child, all endeavours had proved ineffectual, and she had sent for me, because she was afraid of both mother and child. She also told me, that she imagined the head did not present right, for she found the opening at the share-bone, and imagined this was the occasion of the difficulty. On examining, I found it as she had related and was much pleased with the midwife's honest behaviour and sagacious remark. I felt also the vertex backward, pushing outward the os coccygis and fundament. Although the pains were much abated, and  
weaker,

weaker, according to the midwife's account, yet every now and then she had one pretty strong. As I found her pulse rather low and sunk, I ordered her a cordial mixture, and waited with patience to try if the head would advance farther, that the forehead and face might by that means push out below the pubes; but finding it did not advance, and that the pains were not sufficient, I thought it was proper to use the assistance of the forceps. I then had her placed as in the former case, opened the os externum gradually with my fingers, scooped up the head above the brim of the pelvis, and as I slipped my hand flattened betwixt the sacrum and the child's head, I felt with my fingers the back part of the neck, which more fully confirmed the midwife's opinion and mine, of the forehead being toward the pubes. After I had brought down my hand, and found no advantage from several following pains, I introduced the forceps along the ears; having fixed them, and pressed the handles as far back as the perinæum would allow, and tried to bring the forehead and face below the pubes, by little and little, every pain, could not succeed. Thus disappointed, I pushed up the head with the forceps to the brim of the pelvis, turned the forehead to the left side thereof, and brought the vertex down to the lower part of the right ischium; then turned the forehead backward to the concave part of the sacrum, the occiput below the pubes, and delivered the head and body as in the former case.

Those cases in which the vertex presents with the forehead to the groin or pubes, happen but seldom. If the head is small, it is commonly delivered with the labour-pains, because the external parts, viz. from the os coccygis to the frænum labiorum, will frequently stretch down so much as to allow the forehead and face to come out from below the pubes; and if the pains fall off, and the woman becomes low and weak, the forceps will assist where the pains are insufficient. But if the head is large and squeezed to a great length, those parts will seldom stretch so much as to allow the delivery to be performed in that manner, either with the pains or forceps, without the danger of tearing the perinæum, and even sometimes the vagina and rectum, into one cavity; besides, if the head stops there a long time, the child is frequently lost by the long compression of the brain, exclusive of the danger from bruising and inflaming the parts of the woman; to prevent all which inconveniences, it is better to help in time, and deliver, if possible, according to the above method; especially in those cases where you cannot alter the wrong position with your hand, or one blade of the forceps, or turn the child and deliver by the feet.

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### C A S E V.

*Communicated by Dr. Burban.*

THE woman had been in strong labour for many hours, after the waters were discharged. As the os uteri was not sufficiently open, he administered opiates from time to time, which refreshed her much; but after waiting a long time, and the woman growing weak, and falling into faintings, he tried to dilate the parts during every pain; and at last found, that what obstructed the head's advancing, was no other than the forehead being to the pubes. He then introduced and fixed the forceps along the ears, but could not move or alter the forehead to the side and back part of the pelvis; yet, by dint of pulling with great force, he at last delivered the head as it presented. The child was alive, and the mother recovered.

He



He sent me an account of two other cases, in which the head presented fair, but as the women were much fatigued and weakened before he was called, he delivered each with the forceps, and saved the children as well as the mothers. One of the women was violently cramped in her limbs when he introduced the forceps, and the other was attacked with a flooding.

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## COLLECTION XXIX.

*Laborious cases of women delivered by the forceps, the vertex presenting, the ear to the pubes, and the head higher in the pelvis.*

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### C A S E I.

I WAS called to a poor woman, who had been deserted by her midwife, so that I received but an uncertain account of the case. I was told in general, that she had lost a great deal of blood, and that her midwife had fatigued and wrought on her very much. I found her pulse very weak, her countenance pale, and cold sweats on her extremities. The mouth of the womb was largely opened, the membranes were broken, the head was small, and down to the middle of the pelvis, the occiput to the left ischium, and the ear toward the right groin. I was told that the labour-pains had all along been trifling, and had entirely left her after the waters came off. As the flooding was mostly abated, I ordered her to take some broth, or brown caudle, to support and nourish her. Having sent for those who were under my instructions, we attended some time to see if the labour-pains would return, but to no purpose. Being afraid of censure if she should die undelivered, I thought it was proper to supply the place of the pains, by assisting the delivery with the forceps, especially as she had formerly bore children, and the head was small. The ears being to the pubes and sacrum, I kept her on her side, and applying each blade of the forceps, brought down the occiput to the lower part of the left ischium, and turned the forehead backward to the sacrum; then I delivered the head by turning the handles of the forceps forward to the pubes, the thighs of the woman being kept asunder by a thick pillow, placed betwixt the knees, at the same time supporting the perinæum with one of my hands, to prevent its being torn. Thus the patient was safely delivered of the child, and afterward of the placenta; for though she continued long weak, she at length recovered. The child appeared to have been dead three days, the lips and scrotum being livid.

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### C A S E II.

I WAS called to a woman in Parker's-Lane, who, as the people about her alleged, had been in labour eight days; they said three midwives had attended and left her; that she was very poor, and in a starving condition. I found the head of the child, in time of pain, pushed down with its vertex to the lower part of the left ischium: but after the abatement of the pain, which was very weak, it was retracted to the upper part. As this was in the middle of the day, I sent for some broth and bread from a cook's shop, in order to refresh her. I found by her own relations, that the midwives had all tried to deliver her by hurrying and placing her in different positions;

tions: that she had got little or no sleep for two nights; that the waters came off the preceding day, and her pains had never since been stronger. Her pulse was weak and low, but on taking a little nourishment, she recovered some strength. After having sent for those who were under my instructions in midwifery, I left her to the care of one of the elder pupils; advising him to keep her quiet in bed, and to give her from time to time a little broth or brown caudle; for although I found the case was such that I could deliver her with the forceps, yet I thought it was better to try if she could be delivered by the labour-pains, which I hoped would grow stronger after she should have enjoyed some refreshing sleep, and her strength should be recruited by nourishment. I was called again about one o'clock next morning, when I understood she had every now and then slept betwixt the pains, which recurred at long intervals, and were still weaker than I expected, considering that her strength and spirits were much recruited. I found the head was in the same situation, and still drawn back as before. After examining more narrowly, I could easily feel one of the ears at the pubes, the fore-part of it being upward and toward the right side. Perceiving the head was not large, I told the attendants, that the delivery seemed to be retarded by the contraction of the uterus before the shoulders, and the weakness of the pains, which had not force sufficient to overcome that resistance; that I did not question, as she was now stronger, they might in time be sufficient without any other assistance; but I thought it a pity to keep her longer in such a situation, as I could easily assist with the forceps, by pulling along the head by little and little every pain, and preventing it from being afterwards retracted. Accordingly I kept the patient on her side until I applied the forceps, as in col. xxvi. No. ii. case iii. then tied the handles together with a fillet, and turned the patient on her back, as in col. xxv. No. i. case i. These previous steps being taken, I pulled gently during every pain, until I brought the head a little lower, and could turn the forehead from the right side of the pelvis to the sacrum; after this change was effected, I continued to assist and bring the head lower; and the parts below were gradually pushed out with the head in form of a large tumour. This being the woman's first child, the frænum felt very rigid, and was stretched with difficulty; and the perinæum and parts about the fundament and os coccygis felt still very thick. As I continued to keep down the head and assist by pulling during every pain, these parts were more and more stretched, and became thinner; and the os externum was at last so much dilated, as to allow the head to pass and be delivered, as described in the last-cited case; but more than half an hour elapsed after the head was brought low down, before the os externum was so much dilated that I durst venture to pull up the head from the perinæum, which I was afraid every time I pulled would crack and give way; for it was now as thin as a piece of parchment at the edge, and was lengthened to more than three inches.

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### C A S E III.

**A**BOUT seven in the morning I was called to a woman near the Seven Dials. The midwife told me, that when she was called the preceding evening, she had found her in pretty strong labour-pains; that about twelve the waters came off; immediately after the discharge of which the patient was thrown into violent convulsions, which went off and returned three or four times; and she had dozed and lain stupid betwixt the fits. I examined, and found the head of the child lying much in the position described above; only

only the head was lower down, and the occiput to the under part of the right ischium. I could also plainly distinguish the lambdoidal crossing the end of the sagittal suture, the head squeezed to a longish form, one of the parietal bones riding over the other, and the fontanel up at the middle of the left ischium. During the time of my examining she was thrown into a fit, which lasted near a minute, and acted much the same as a labour-pain, by pushing the head a little lower, though it returned gradually to the same place, as the violence of the convulsion abated. The midwife had not observed this circumstance in time of the former fits, but told me that it had continued in that position without advancing for two or three hours. As the woman's pulse was quick and full, I ordered her immediately to lose eight ounces of blood; and desired the midwife to send for me if the convulsions should return and the delivery be much longer delayed. The woman was now quite insensible, and did not seem to answer or take notice even when we called to her aloud. I was again sent for about nine, when the midwife informed me that the fits had returned oftener and with greater violence. I found the head in the same position, but about an inch lower, and I now could feel the ear at the pubes. I tried to stretch the os externum gradually every now and then, to see if it would bring on a labour-pain, but to no purpose. In about twenty minutes she was attacked with another fit, which was very violent, continued longer than the former, and had much the same effects. I then considered, that although it was probable the repetition of these fits might act in the same manner as labour-pains, and deliver the child, yet the continuance of them might still more and more endanger the life of the woman. Therefore I easily stretched the os externum as she lay on her side, and introduced the forceps as in the former case; and as I found the head was large, I also tied the handles of the forceps, and turned her on her back. After I had brought the forehead to the hollow of the os sacrum, and was beginning to deliver the head in a slow manner, she was attacked with another fit; and as the os externum easily yielded, she was safely and soon delivered. The fits did not return; she fell into a plentiful sweat. The stupidity gradually wearing off the next morning recovered her senses, and was agreeably surprised to find herself delivered, and the child alive.

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#### C A S E IV.

**B**EING sent by a relation to see an unfortunate woman, who was pretty old, and in labour of her first child, I found she was in a low and weak condition, partly from grief and anxiety, and partly from having been excessively fatigued by the midwife, who wanted to hurry over the labour as soon as possible. The membranes had broken the preceding day, and it was now about five in the morning. I found the head presenting, and down to the lower part of the pelvis, though it had not begun to push out the soft parts in form of a tumour. I could not distinguish the position of the head from the sutures, the hairy scalp being so much swelled. However, I judged that the forehead was to the left side of the pelvis, from feeling a part of the head pressed strongly against the lower part of the right ischium, and sloping upwards to the middle of the left; I could but just reach the tip of the ear at the pubes with my finger, the head was so large, and so strongly compressed against that bone.

I was informed that the pains had been very strong, though now they were weak, and recurred at long intervals. Her pulse was sunk, and she



was taken with faintings and sickness at her stomach, which produced violent retchings. These, however, supplied the place of labour-pains, and assisted the delivery by forcing down the head. To encourage these efforts, as well as to recruit her strength, I directed her to drink every now and then a little warm wine and water; and in this manner she proceeded for about an hour, when finding the head had made but small progress, and being afraid that her spirits would fail, I thought it was most expedient to call in the assistance of the forceps. After having gradually dilated the os externum, as she lay on her left side, I tried to introduce my finger between the head and the pubes to the os uteri, in order to guide the point of the blade; but finding there was not room for both, and being afraid of hurting the bladder, I turned her on her back, so as that she lay in the same position and was supported in the same manner described in col. xxv. No. i. case i. with this difference, that as the season was very severe, I ordered a vessel with hot water to be placed under the bed-side, that the warm steams might mitigate the cold, to which she was more exposed in this than in the other position.

Having fully opened the os externum, I turned the back of my hand down toward the sacrum, and raised or scooped up the head gently to the upper part of the pelvis; and now with my fingers I felt the right ear backward, and the posterior part of the neck at the right side; and distinguished that the pelvis was not distorted, though the head was large and squeezed to a great length. Thus informed, I introduced one blade of the forceps at the back part before I withdrew my hand; then insinuating the other at the left side towards the left groin, I moved it gently to the space below the pubes, and over the child's ear. The instrument being locked, I pressed the occiput from the right ischium with two fingers, while I gradually turned, as I pulled, the forehead backward to the sacrum, and delivered the woman with the same precaution I had observed in the second case of this collection.

#### CASES V. and VI.

**B**ETWIXT eleven and twelve at night, I was called to a woman by a midwife, who told me the patient had been two days in labour; that the waters had been discharged the preceding day; that there was a cross-bone, which prevented the child's head from coming along, and had been the occasion of her losing two children before; and that, as the pains were grown weaker and the woman was much fatigued, she had desired the relations to demand my assistance. I found the head pretty nearly in the same position as that described in the former case, though higher up; but as I did not think the woman in great danger, and learned from the different accounts that she had been put too soon upon labour and was over-fatigued, I desired she would lie quiet in bed, without forcing down, except when she was obliged by the pains. She complained of great pain at the juncture of the ossa pubis, as well as behind, where the ossa innominata join the sacrum; and her pulse being low, and the labour-pains weak, I prescribed the following cordial and anodyne mixture:—*R* Aq. cinnamom. simp.  $\mathfrak{z}$ vs. Pulv. castor. gr. x. Sal volat. c. c. gr. vi. Syr. e meconio  $\mathfrak{z}$ fs. M. sumat. cochlear.  $\mathfrak{r}$  statim, et repet. omni femihora.

In consequence of this prescription, she lay quiet and slept between the pains, so as to be much recruited by six next morning, when I received another call. The head seemed to be but small, although it was squeezed down to a conical and flat form. As she had formerly lost two children, I

resolved to attempt the saving of this, especially as I could easily feel the ear at the pubes. Having gently dilated the os externum with my left-hand as she lay on her left side, I raised the head to the brim of the pelvis, and with my fingers felt that the whole obstruction proceeded from the projection of the upper part of the sacrum with the last vertebra of the loins; at the same time I felt the back part of the neck at the right-side. After I had withdrawn my hand, I waited some time to see if the pains, which were but weak, would force the head lower down; but finding it did not advance, I introduced oneblade of the forceps at the right side of the sacrum, along the back part of the child's right ear, in order to avoid the projection of the last vertebra of the loins, then insinuated the second blade before the left ear, at the left groin of the mother, and as I brought down the head, I turned the forehead to the sacrum. This alteration being effected, I unlocked the forceps, and fixed them over the ears to prevent the child's head from being marked at the temples; and pulling slowly during every pain, safely delivered the patient of a live child.

I assisted in a similar case; the woman was taken in labour, and began to flood violently; but the discharge abated when the membranes broke, and the patient being weak, I delivered her pretty much in the same manner described in the preceding case.

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#### C A S E VII.

**M**Y attendance was bespoke to a woman who had been ricketty in her youth, and was very much distorted. The labour at first proceeded in a gradual manner, the membranes pushing down and dilating both the os internum and os externum before they broke; but after the waters were discharged, the pains ceased for some time. Upon examination, I found the pelvis was narrow and distorted; and with my finger felt the projection of the last lumbar vertebra; the pains, however, gradually returned and grew stronger, and the child's head advanced slowly. I did not confine her to any particular position. I had been called at ten o'clock at night; the membranes broke about four in the morning; at six in the evening she began to be very much fatigued; by this time the head was squeezed into a conical and flattened form down to the lower part of the pubes; and I found by the futures that the forehead was to the right ischium. I now confined her to her bed, that she might not be over-fatigued; and she took her pains, lying sometimes on her back and sometimes on her side.

About three o'clock in the morning the head, squeezed to a great length, had advanced to the lower part of the pelvis, where it was so firmly locked, that I could not introduce my finger at the pubes, to feel the ear. But the patient being exhausted and weak, I introduced the forceps in the manner described in case v. and tried to move the head so as to turn the forehead to the sacrum. These endeavours proving ineffectual, I withdrew the instrument, and waited till about six o'clock, when the head was pressed a little lower down; then having recourse to the forceps again, I succeeded, and safely delivered the woman, as in case ii. and v. yet she complained very much of the distention and contusion of the parts. As for the child, it was dead; and its death, in all probability, occasioned by the long compression of its brain. Its head was squeezed to a very extraordinary length; a circumstance from which I at first imagined it was lower in the pelvis than it afterwards appeared to be.

## C A S E VIII.

A MIDWIFE, who had formerly attended a woman of a small size, in a labour which had been very tedious from the difficulty in bringing along the head of the foetus, which was still-born, the head being compressed to a prodigious length, and the woman's life greatly endangered; in order to avoid censure, and prevent as much as in her lay the bad consequences that might attend her second labour, she had recourse to my assistance. The patient being a poor woman, I went, accompanied by three of my pupils, and found the child's head pushed down but a very little way into the pelvis, the forehead resting upon the left side of the upper part of the os sacrum, and the hind-head against the right groin. We likewise felt the sagittal suture running along toward the left of the os sacrum, and the hairy scalp of the foetus very much tumified.

The patient being laid on her back, and her breech brought to the bed's feet, I opened the os externum slowly, and pushing up my hand along the side and posterior part of the pelvis, felt the left ear of the child, by which I knew the forehead was toward the back, though a little to the left side of the woman; I at the same time felt the upper part of the sacrum and lowest vertebra of the loins projecting so far forward as to reach within three inches of the ossa pubis. The pains being still pretty strong, I waited some time to see if the head would advance, but it made not the least progress; the pains and patient grew weak, and the uterus was strongly contracted. As the former child had been lost by the long pressure on the brain, I resolved to try the forceps; and should that method prove ineffectual, as I feared it would, to open the head and deliver with the crotchet. Having therefore introduced the steel extractors, which on this occasion I preferred to those made of wood, I fixed them along the sides of the ears; and pulling downward, at first, with a good deal of force, when I found the head descend to the lower part of the pelvis, I turned the forehead into the hollow of the os sacrum, so that the hind-head came out from below the os pubis; then directing one of my pupils to press the flat part of his hand against the perineum, which was very much distended, I raised up the forceps, and pulled the head half-round, forward and upward, on the outside of the pubis. I afterwards delivered the body of the child, which was of a small size, and the lower parts were besmeared with meconium. One blade of the forceps had been fixed along the fore-part of the ear, and rested on the temple, while the other extended along the back of the left ear to the cheek; and the impression which they made was very inconsiderable. As for the woman, she recovered much better than I could have expected. When I afterwards introduced my hand to deliver the placenta, it went up with difficulty; and I was then confirmed in the opinion that the distance between the projection of the lower vertebra of the loins and the os pubis did not exceed three inches.

I had before this occasion contrived a particular kind of wooden forceps, with which I had delivered three patients; but I now substituted steel covered with leather in the room of wood, which is not so durable,



## COLLECTION XXX.

*Of laborious cases from the presentation of the forehead or face, in which the women were delivered by the forceps.*

[Vide Part i. Book iii. Chap. iii. Sect. iv. N<sup>o</sup> iv. and Tab. xxii. xxiii. xxiv. xxv. and xxvi.]

## CASES I. and II.

I WAS called by a midwife to a woman in Windmill-Street, who formerly used to have very quick labours; but this had been very tedious, from the wrong presentation of the child's head. The midwife told me she felt something like the eyes toward the patient's left groin. When I examined in time of a pain, I found her information true, and that the forehead presented, with the face to the left side and the fontanel to the right. In this situation I understood it had stuck for a long time, without making the least progress, although the pains had been strong and frequent. While she lay on her side, and took several pains, I considered the case at leisure. As the pelvis was large, I resolved, if possible, to alter the position of the head; and should I fail in that attempt, turn the child and bring it footling. But, after having dilated the os externum so as to admit my hand, I found all my efforts ineffectual, either to raise the forehead to the left side of the pelvis, that the vertex might come down to the other side, or to return the head into the uterus, so as to deliver it by the feet; for the uterus was so strongly contracted as to foil all my attempts. Thus baffled in these endeavours, I introduced one blade of the forceps along the left ear at the pubes, and the other on the opposite part at the sacrum; and began to turn the face backward to the left side of the sacrum, that the vertex might come out from below the pubes; but recollecting that the vertex would be turned so far up between the shoulders as to render the delivery difficult, I reduced the face to its former situation at the left side; and bringing the head by degrees lower and lower, very easily turned the face and chin to the space below the pubes; then holding the handles of the forceps toward the patient's belly, delivered the child, whose forehead was raised in a conical form, while the back part of the parietal and occipital bones were squeezed flat. I tried with my hands to mould it in a better shape; but it had been so long compressed, that I could not alter the form.

I attended in a case where the face presented. The waters had been several hours discharged, and the midwife told me, that the head had stuck a long time in that position without advancing in the least. When I examined, I found the chin to the lower part of the pubes, and the forehead to the os sacrum. The patient being greatly fatigued, and the force of the pains very much abated, I resolved to assist as soon as possible with the forceps, in order to deliver the child, which I knew to be alive; for, in examining the situation of the head, my finger slipping into the mouth, I felt it move its tongue and lower jaw; though I did not mention this circumstance to the mother, that she might not be overwhelmed with anxiety, in case it should be afterwards still-born. The ears being to the sides of the pelvis, I caused the patient to be laid supine across the bed, as in col. xxv. No. i. case i. and having gradually dilated the os externum, endeavoured to introduce the fingers of my right-hand to the os uteri, at the left side of the pelvis;

pelvis; but I could neither reach that part nor raise the head to make more room for my fingers. Then I tried to insinuate a blade of the forceps between the head and my fingers, in an imaginary line, with the scrobiculus cordis; but finding a considerable resistance, and being afraid that the blade would pass on the outside of the os uteri, I withdrew the instrument. However, after two or three trials, in which I kept the point closer to the head of the child, I effected my purpose, and introduced the other blade on the opposite side in the same slow and cautious manner. Then locking and tying the handles together with a fillet, I began to pull during every pain, and as I pulled with my right-hand I pressed down the chin with two fingers of my left. The perinæum and parts below were now pushed out in the form of a large tumour; the anterior part of the neck being brought down to the lower part of the pubes, I turned the handles of the forceps toward that bone, pulled the head upward so as to raise the parietal and occipital bone from the back parts, and bring them slowly with an half-round turn upward through the os externum; and, at the same time, I kept my left-hand firmly pressed against the perinæum, in order to prevent its laceration. I afterwards delivered the body of the child, whose face was livid and very much swelled, though the ecchymosis went off as the tumefaction subsided. The form of the head, which was squeezed to a great length, I altered a little, by pressing the vertex and forehead between my hands.

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C A S E III.

ABOUT nine o'clock in the morning, I was called by a gentleman who had formerly attended my lectures, to a woman in labour, and found the child's face presenting. He told me a midwife was employed to deliver the patient, but his attendance had been bespoken in case any extraordinary incident should intervene; that the case having turned out a preternatural position of the head, his assistance was solicited, and he had that morning made several unsuccessful attempts to raise it into the uterus, and bring the child by the feet.

As I could not accompany him immediately to the place, the midwife, in the mean time, called in another practitioner, who, when I arrived, proposed that the woman should be delivered with the whalebone and fillet. Upon examination, I found the face presenting, about two-thirds of the head down in the pelvis, which I concluded to be large, because her former labours had been quick and easy, and the chin at the lower part of the right os ischium. I therefore gave it as my opinion that she might be easily delivered with the forceps; but desired the other gentleman to take his own way, if he thought it a better expedient. Upon his declining the task, and the other's request that I would lay the woman, I caused her breech to be moved to the fore part of the bed, as she lay on her right side, and a pillow to be placed between her knees, which were held up toward the abdomen. These previous steps being taken, I introduced the fingers of my right-hand up to the vagina, between the child's head and the os sacrum, until I felt the os uteri, and insinuated one blade of the forceps along the ear, holding the handle down toward the chin, that the blade might go up in a line to the vertex, which was above the brim of the pelvis to the left side. As the point passed the os internum, I withdrew my left-hand, to allow room for turning the handle backward to the perinæum, that I might the more easily push the point forward, and follow the convexity of the sacrum. Taking hold of the handle with my left-hand, I introduced the fingers of

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my right, betwixt the pubes and the child's head, to the os uteri, and insinuating the other blade betwixt the head and my fingers, gently pushed it within the mouth of the womb; but as it met with some difficulty, I withdrew my fingers to give more room, and pressing the point closer to the head, introduced it slowly, and with great caution, that the bladder and os internum might not be bruised.

Both blades being thus introduced in the same direction, and the handles locked together, I pulled gently, moving the head from ear to ear, until it was brought lower down into the pelvis; then, with the assistance of two fingers pressed above it, I turned the chin and anterior part of the neck forward, from the lower part of the right ischium to the space below the pubes, so that the forehead was at the same time turned from the left ischium to the lower part of the sacrum and coccyx: lastly, I moved the handles toward the pubes, and delivered the woman of a child, whose face was swelled, and whose head was compressed like that described in the former case: the long compression had rendered the arms paralytic for several days, though this misfortune was soon remedied by frictions and embrocations.

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#### CASES IV. and V.

**I** WAS called by a midwife to a woman in labour, and found the child's face presenting, and so excessively swelled, that I at first mistook it for the breech; but, on farther examination, I felt the mouth and chin toward the sacrum, and the fontanel at the pubes. The midwife told me that the waters had long been discharged; that notwithstanding a succession of strong labour pains, the head had made no progress for several hours; and that as the pains had greatly abated, she desired the relations to demand farther assistance; at the same time she gave me to understand that the woman's former labours had been quick and easy. Her strength and spirits being exhausted, I encouraged her with hope, and refreshed her with a glass of warm wine; then directing them to place her in the position described in the second case of this collection, I gradually dilated the os externum. This dilatation being effected, I introduced the fingers of my right-hand between the sacrum and the chin, and raised the head to the upper part of the pelvis; but found the contraction and resistance of the uterus so great, that I could not possibly turn the child and bring it by the feet. I then introduced the blades of the forceps along the ears, holding the handles as far back as the perinæum would allow, that the blades, being in a line with the middle space between the umbilicus and scrobiculus cordis, might be nearer the vertex, and have a better hold of the head. Having locked the handles, I endeavoured to bring the head lower down, but could not move it; then I tried to turn the chin, first to one side, and then to the other; failing likewise in this attempt, I pushed up the head, moving from blade to blade, and turned the chin to the upper part of the left ischium; but as I again endeavoured to bring down the head, the chin stuck so fast, that I was afraid of straining the lower jaw, and obliged to push up the head a second time with the forceps. I now introduced two fingers above the chin, and pulling the forceps with my left-hand, brought it down to the lower part of the ischium, and turned it, with the fore part of the neck, to the space below the pubes; then standing up, and pulling the handles toward the abdomen, delivered the head, which was greatly tumified. Nay, after the body was delivered, the child lay a long time without breathing, or giving any signs of life.



Some time after the foregoing case, I was called to a woman who had been long in labour, and found the face presenting with the chin to the lower part of the sacrum, though a little to the left side; indeed, the face was so low down, as to protrude the parts of the woman in form of a tumour, and her pains were by this time much weakened. The weather being extremely cold, I allowed her to continue lying on her side, though a supine position would have been more convenient; and causing her breech to be moved a little over the bed-side, while her head and shoulders lay toward the other side, I introduced the forceps, as in the former case: but finding it impracticable to raise the head, I was obliged to pull it along in the time of every pain, as it presented. The parts between the coccyx and os externum were gradually extended by the face and forehead of the child, and at last yielded, so as to allow the vertex to come out from below the pubes; then turning the handles of the forceps toward the bone, I delivered the woman safely of a dead child, which was, in all probability, lost by the long compression of its head in the pelvis.

END OF THE SECOND PART.



# SMELLIE'S MIDWIFERY.

## PART THE THIRD.

### A C O L L E C T I O N O F C A S E S I N M I D W I F E R Y.

#### COLLECTION XXXI.

*Laborious cases, in which the head of the child presented, and the child was delivered with the assistance of the hand, blunt-hook, or crotchet.*

[Vide Part i. Book iii. Chap. iii. Sect. v. Tab. xii. xvi. xxviii. xxxix.]

#### C A S E S I. and II.

*A dropical head opened with the scissars, delivered by the labour-pains with the assistance of the hand; the other with the blunt-hook.*

A MIDWIFE sent for me to a poor woman, and allowed me to bring one of my pupils as an assistant. The patient had been all night in strong labour; and, after the membranes were broken, the midwife also told me, that she suspected the head presented wrong, having found the fontanel turned to the pubes. At first when I examined, I was of her opinion, and imagined this position retarded the delivery; but introducing my finger backward toward the sacrum, I found a large open space also betwixt the bones of the head. Both the midwife and assistant being sensible of the same, I told them, that the difficulty of the case was occasioned by the head being dropical, and so much distended, that it would not pass, unless the hairy scalp was forced out with the contained waters, or perforated, to allow their discharge. Having again examined in time of a few pains, and finding the hairy scalp did not push down, that the pains grew weaker, and the patient being seized with several fainting fits, I also thought it was wrong to delay the delivery any longer. I had her laid across the bed, with her breech a little over the side, and, in time of a pain, introduced two fingers of my left hand into the vagina. These I pressed against the open space betwixt the bones of the cranium; then, with my other hand, introduced the points of the scissars along my left, and betwixt the two fingers, to prevent their hurting the woman. The pain abating, I waited till another returned; and when it was at the strongest, I perforated the scalp, by pushing the point of the scissars through the integuments.

integuments. The waters immediately gushed out, about three pints, in a full stream. The head being thus emptied, was forced down into the vagina; and this being her first child, it was in a few pains more delivered. During these, however, a pint more of water was squeezed out. As the pains were weak, I assisted, by pulling at the opening with my fingers. The child had been dead several days.

The same midwife called me to another woman, having, by her experience of the former case, found it was also a dropical head, the bones of the cranium being separated at a great distance from one another. The woman had not found the child stir for several days, and but very weakly for a week or two before; the membranes had broken the day before, the pains had been frequent and strong; but the head did not advance. In time of a pain, I found the hairy scalp very tense, and the os uteri fully open; when the pain abated, the bones of the cranium felt loose, and easily moved within the scalp; which was a certain sign the child had been dead some time, and that it would be wrong to keep the woman longer in pain. As she lay on her side, I perforated the scalp, as in the former case. Although there was a large quantity of water discharged, and the bones felt in a shattered condition, riding over one another. yet, even after many strong pains, they were only advanced to the middle of the pelvis. I then tried to assist, by pulling at the opening with my fingers; but that purchase not being sufficient, I introduced the blunt-hook within the skull, and with the assistance of my fingers, gradually extracted the head; and the body being small, was easily delivered. The child appeared to have been dead several days, from the parts being livid and the scarf-skin separating on the least touch.

It is worth remarking, that, although the woman had the confluent small-pox in the fifth month of her pregnancy, recovered, and went on to her full time, there was no mark of that disease to be found on the body of the child.

### C A S E III.

*A laborious birth, from the large size of the child and the smallness of the pelvis; delivered with the blunt-hook.*

I WAS called to a woman, who had been several days in labour. She had been delivered twice before with great difficulty, although the children were small, and before the full time. The midwife told me, that the waters were gone off two days; and although the pains had been very strong, it was a long time before the head came down into the lower part of the pelvis. She had been in hopes that it would have been delivered every strong pain, during all the foregoing night; but as the pains went off, and the woman was grown weaker, she advised the friends to send for farther assistance. On examining, I found the pudenda very much swelled, the head low in the pelvis, and a large tumour on the vertex, protruded through the os externum. The woman's pulse was low, intermitting, and like one in a dying condition; her pains were also very weak, and returned at long intervals. I informed the friends of the great danger the woman was in, even if she were delivered, owing to her extreme weakness; but told them, as a speedy delivery was the only method to save her life, I should do all in my power.



As she lay on her side, I tried to force up the head, to give more room in the pelvis for introducing a fillet over the vertex; but it was so low down and firmly locked in, that I could not move it. This method failing, I opened the head with my scissars, and introduced the blunt-hook on the outside of them; then I tried to deliver, by pulling the instrument with one hand, while with the fingers of the other I assisted in the opening; but the hook losing its hold, I introduced it on the other side of the head; and as it did not give way as before, the cerebrum was gradually discharged at the opening, as the head advanced; after which the child was soon delivered.

On examining the body, I was certain it had been dead many hours before delivery; for the lips and scrotum were of a livid colour. The first hold of the hook was on the back part of the neck; the second was on the fore part, above the lower jaw. The swelled parts of the woman were turned black and livid; from which appearance I suspected a mortification was also begun in the uterus, especially as she had complained of violent pains in the abdomen the night before; but they had been gone off for some hours, and therefore the assistants did not inform me of this circumstance till after delivery.

I was informed next day, that the patient gradually grew weaker, turned delirious, and died next morning. I am now pretty certain, from many examples since, that if I had been called the day before, the woman would have been saved. I am also convinced, that if I had known the use of the forceps, I should not have been obliged to open the child's head, especially as it was so far advanced, and the pelvis not distorted.

#### CASES IV. and V. (*Laborious.*)

**I** WAS called to a woman who had been long in labour, and had not felt the child stir for twelve days; since which time she had been thrown into great fear by a fall from a horse, and on that account the midwife supposed the child was dead. When I examined the case, I found the head of the child advanced to the lower part of the pelvis; the discharge on the clothes was of a brownish colour, and had a strong mortified smell: the patient was much exhausted with the length of her labour, and her pains were weak.

Having placed her in a supine posture (as described in collect. xxv. No. i. case. i.) I tried to turn and bring the child by the feet, but could not raise the head above the brim of the pelvis. In making this effort, I was convinced that the obstruction of the delivery did not proceed from a narrow pelvis, or a very large head. With a good deal of difficulty, I introduced a fillet, in form of a noose, over the fore and hind parts of the child's head, and pulled gently every pain, which did not, however, move or alter the position; this obliged me to increase the force, by which the fillet slipped from its hold. As there was no time to be lost, I opened the head, and tried to deliver it, as in the foregoing case; but not succeeding, I withdrew the blunt-hook, and introduced a straight crotchet, by which the head was extracted, after using much force. On trying to deliver the body, I was surprised that I could not bring it along; and suspecting the difficulty was owing to the bulk or monstrous deformity of the child, I introduced the straight crotchet along the breast; but it lost its hold, after it had tore open the thorax. I again introduced it, as high as the length of it would allow; and at last, with great force and labour, delivered the body.

Upon

Upon examination, I found the difficulty proceeded from the belly being greatly tumified after death; and that the crotchet, at the first trial, had only tore open the breast; but, by opening the abdomen in the second effort, the swelling subsided.

I was called by a midwife to a case of the same kind, where I extracted the head with the forceps; but not being able to deliver the body of the child, I was obliged first to tear open the thorax, and afterwards the abdomen. In this operation I found that the curved crotchet succeeded better than the straight kind.

#### C A S E S VI. and VII.

*Laborious ones; the uterus contracted before the shoulders of the fetus.*

A MIDWIFE sent for me to an acquaintance of her's, at one of the work-houses, who had been five days in labour, and was neglected by the surgeon and midwife of the house. The midwife told me, she had been with her all night; that she had lost a great deal of blood; and that she thought the child was dead, as the woman had not felt it stir for two days. On examining, I felt the head low down in the pelvis; but as she was so very weak, I desired the surgeon might be sent for, who was not to be found. As there was still more danger in delaying longer, I thought it a pity to refuse giving all the assistance possible. I first tried to deliver with the forceps; but was surpris'd that I did not succeed, when I found the head was not large, the instrument so easily introduced, and firmly fixed; I therefore opened the head; and, in trying to deliver it with the assistance of my fingers and the blunt-hook on the inside of the skull, I could not, with all my strength, bring it along. However, by extracting the occipita and one of the parietal bones, I had room to introduce my hand, so as to find with my fingers the under part of the uterus strongly girt, or contracted round the neck of the fetus: this I gradually dilated; then bringing down one of the arms, and pulling at that and the shattered bones and scalp with both my hands, I at last extracted the child with greater ease than I expected.

In pushing up my hand to dilate, my fingers passed the mouth of the womb that was girt round the middle of the head, when I was surpris'd to find another contraction before the shoulders. This was the first time I observed that different parts of the uterus would contract so strongly, especially the under part before the shoulders, a constriction which has been commonly ascribed to the mouth of the womb. The woman recovered, contrary to expectation, but was long in a weak condition.

I was called to a case much of the same kind, only the head of the child was larger, and squeezed into a longish form; the woman was also stronger, and had not been exhausted with floodings; but as she had been long in labour, the head low, and the labour-pains quite gone off for several hours, I was afraid, if assistance was delayed, she would soon be in danger of her life. I first tried to deliver the head with the French forceps, recommended by Mr. Butter, in the Medical Essays of Edinburgh; but they were so long and ill formed, that I could not introduce them safely to take a proper hold; therefore attempted to deliver with the fillet or lack; which, though fixed firmly, had no power to bring along the head, though I used considerable force in pulling by that hold. This method not succeeding, I waited some time, as the pulling the head with the lack had brought on some pains; but the woman growing weaker, and assuring me she had not found the

child stir for seven or eight days, I thought it more than probable that it was dead, and the body so tumified as to prevent the delivery. The woman and her friends being impatient, I thought it was wrong to run too great a risk of her life, and delivered the child, by opening the head, and extracting the body with the assistance of the crotchet. I could not deliver the head, even after the cerebrum and several bones of the cranium were discharged, until I had also opened the abdomen.

The body of the fœtus was livid, and swelled, so that it had certainly been dead the time the woman mentioned.—She herself recovered, as if no such difficulty had happened.

### C A S E VIII.

*A laborious one ; the head of the child high in a narrow pelvis ; delivered with the hand and blunt-hook, or crotchet.*

MRS. MUIRHEAD, midwife in Hamilton, sent for me to a woman who had been in severe labour for twelve hours after the os uteri had been sufficiently dilated, and the membranes broken. On examining, I found the head still above the brim of the pelvis, and kept up there by the projection of the lowest vertebra of the loins, and upper part of the sacrum. This straitened the passage, which felt not above two inches and a half from these bones to those of the pubes. I advised them to keep her quiet in bed, to prevent her being fatigued, and give time for the head to advance in a slow progression, as well as to keep up her strength by refreshing sleeps betwixt the pains. These directions had the desired effect: but having waited from morning to night, and finding the head was only squeezed down a little, in a conical form, into the narrow part of the pelvis, I sent for another gentleman of the profession. After we had waited all night to no purpose, observing that the patient grew weaker, and that the head did not advance, we thought it advisable to attempt the delivery, rather than to wait longer, and run too great a risk of her life: we also considered, that the pelvis was so narrow, it would be impossible to save the child's life; and if it was uncommonly large, it would be even dangerous to the life of the mother. Having placed her in a convenient position, and in a cautious manner opened the protruded scalp (which was much tumified) together with one of the parietal bones, with the scissars, I introduced two fingers of my left-hand, and tried to pull down the head in time of the pains; but finding that purchase was not sufficient to move it, I introduced the blunt-hook first within the cranium; but this not succeeding I introduced two fingers on the outside of the head, at the right side of the sacrum, and, along the same the hook, with my right hand, to the upper part of the head. After resting a little until a pain returned, and introducing again the fingers of my left-hand into the opening, I began to pull; but finding this hold of the instrument forced the head too much against the pubes, I moved it forward toward the right groin, and then, with my fingers and the hook, pulled the head backward and down toward the lower part of the sacrum, at the same time desiring the woman to force down with all her strength. To prevent, as much as possible, any injury to the parts of the woman, I repeated these efforts by intervals, which at last brought along the head, squeezed in a long and flat form. This being effected, the body was delivered in a slow manner, but not without a good deal of force.

On examining the child's head, I found the first hold of the hook was above the ear, and the second on the opposite side, above the under jaw; the



the opening with the scissars was made through the left parietal bone. My fingers and thumb had so firm a hold, as to assist in pulling the head backward from the pubes, while the force above, with the hook, made the bones collapse, as the cerebrum was discharged through the perforated part; but although the head was small, it required a great deal of force to bring it through the narrow part of the pelvis.

The woman recovered tolerably well, but did not live to have another child.—*Vide collect. xxxiv. No. ii. case x.*

### C A S E IX.

*A laborious one; the child delivered with the curved crotchet, covered with its sheath to guard the point.*

**B**EING called to a woman who had been a considerable time in labour, I felt the head of the child presenting; about a third part of it being pushed, in a longish form, into a very narrow and distorted pelvis. As the patient seemed to be in no apparent danger, and as both herself and friends were anxious to have her delivered, and could not be persuaded to have more patience, I ordered a mixture to amuse them, and advised the midwife not to fatigue her any more, but to keep her as much in bed as possible.

When I called again in the afternoon, I found the head advanced a little lower, and the woman much refreshed with rest and sleeps betwixt the pains. I still encouraged her to have more patience, and continue to take every now and then some of the mixture.

I was sent for again next morning about two o'clock, and found her strength much exhausted; her pains, which had been frequent and strong, were now seldom and weak; besides, a small flooding began to come on.

The head had not advanced lower, only the hairy scalp was formed, by the long pressure, into a large tumour on the vertex, which prevented my knowing the exact position; but as it was still high in the pelvis, I judged one of the ears was toward the sacrum. Although I was afraid that the woman could not be delivered with the labour pains, yet as she imagined she felt the motion of the child, I waited many pains, and tried if putting her in different positions would forward the delivery; but finding her spirits flag more and more, and the flooding increase, I began to be afraid of losing the patient if I longer delayed my assistance. Having laid her in a proper position, as described in collect. xxv. No. i. case iii. and dilated the os externum, I forced up the head, to be more certain of its position, but could neither reach the ear nor back part of the neck with my fingers, without using more force, which I durst not venture to exert on account of the flooding. However, this trial made me sensible of the head being so large, that there was no hope of saving the child by turning and bringing it footling; and it was impossible to deliver it with the forceps. To prevent farther danger, I opened the head of the fœtus with the scissars; and, in time of the weak pains, tried first to deliver with my fingers and the curved crotchet, covered with its sheath within the opening; but although, in making different efforts, I pulled out the frontal, occipital, and right parietal bones; I did not succeed until the crotchet was slipped up on the outside of the fractured remains, above the under-jaw. As my fingers were cramped, I rested a little; after which untying and bringing down the sheath that covered the point of the instrument, and finding it had a firm hold, I at last brought out the head.

Having

Having wrapped a cloth round it, I made several trials to deliver the body, but could not move it with all my force, until I introduced the same crotchet along the breast and belly; and by opening these, as in the 4th case of this collection, I at last effected the delivery; and indeed not without much fatigue.

By the livid appearance of the child's body, the woman and friends were convinced that it had been dead for some time, and that the difficulty proceeded from the uncommon bigness, as well as the tumifaction of the abdomen.

This was the woman's first child; I attended her in a second and third; her labours were tedious and the children large, but at last safely delivered.

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### C A S E X.

*The pelvis narrow, and the child large; delivered with two crotchets.*

I WAS called by a midwife to a woman in her house; the child presented much in the same manner as the foregoing; she had pretty strong pains, and was every now and then attacked with severe fits of vomiting; but as she was in no apparent danger, I ordered a few draughts with the spirit-Mindereri. Being again called, and finding that the patient was growing weaker, and she being much fatigued with the vomiting that still continued, as well as the length of the labour, I at first tried to turn the child; but, in pushing up the head, I found it large, and the pelvis so narrow that the child could not be saved by that method. I also found that the forceps or fillet could be of no service; however, I rested some time to observe, if, after stretching the parts, they would allow more room for the head to advance lower; but finding no alteration, and she being attacked with faintings, I immediately opened the head and tried to deliver with the blunt-hook, as in the former cases, but not succeeding, and as the forehead was at the left side of the pelvis, I introduced one of the curved crotchets along the left side of the sacrum, above the under-jaw; finding that purchase pulled the head against the pubes, I introduced the other at the opposite side of the sacrum, and moved it gradually over the occiput of the fœtus to the right groin of the woman.

Finding that both the instruments had a firm hold, and locking them together in the same manner as the forceps, I began and pulled with greater and greater force, which brought down the head lower in the pelvis; but as it stopped there, I unlocked the crotchets, and pulled by the one that was at the right side, by which it was forced backward toward the sacrum, and delivered. Although I used all possible caution, yet it required so great force at the last pull (this being the first child) that the perinæum was a little rent; but by the prudence of the nurse it recovered without the woman's knowledge.

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### C A S E S XI. and XII.

*The face of the child presented; the head low in the pelvis, and delivered with the crotchets.*

I RECEIVED a message from a gentleman of the profession, desiring me to come and assist him to deliver a poor woman, and to bring two pupils with me, which the patient had consented to, to make me some recompence for my trouble. He had been with her all night; her pains at first

first were strong, which growing weaker, he tried several times to turn the child and deliver by the feet, but not succeeding, and being much fatigued, he had recourse to my assistance. I also tried the same method to bring the child footling, turning the woman upon her knees and elbows, according to Davenport's advice, that the pressure or force of the muscles of the abdomen might be diminished: but after several trials, I could not move the head so as to introduce my hand into the uterus.

The face was much swelled, and the chin being to the sacrum, I introduced the forceps along the ears at the sides of the pelvis; but after several efforts, could not move the head lower, or alter the chin so as to turn it to the groin or pubes. I afterwards tried to open the head with the scissors at the os frontis, which presented at the pubes; but the bones were so thick, that I could not make an opening sufficient to allow a discharge of the cerebrum.

All these different methods failing, I introduced the two curved crotchets, one on each side, which tore open the bones of the cranium; then the contents were evacuated, the head was diminished, the foetus delivered, and the woman recovered.

A midwife sent from one of the courts at the Seven Dials for me, or one of my oldest pupils, to assist her in delivering a poor woman there. As I was then engaged, Mr. Potter went; and he finding the face of the child presenting, and the patient exhausted with the length of the labour, endeavoured to turn the child; but not succeeding, he sent for Mr. Chapman, who had been longer with me: he likewise attempted to turn the child, and deliver with the forceps, but failing in his endeavours, my assistance was required. When I arrived at the house, the midwife told me that the woman had formerly easy labours, and that she at first imagined the breech of the child presented, and had waited a long time till her patient's strength began to fail; but at last she found her mistake, and that in place of the breech the head presented, and had stopped in that position for many hours; on which account she had desired farther assistance, to save the woman's life. I found the face much swelled, and the chin to the left side of the os coccygis. In trying to raise the head, to give more room for introducing a blade of the forceps, I felt it so firmly locked, that it was impossible to move it. As I did not certainly know whether the child was dead, and being desirous to save it, if alive, I with some difficulty introduced one blade of the forceps over the left ear at the left groin, and the other at the right side of the pelvis of the woman, and right ear of the child. After trying several times to deliver the head with that instrument in time of the weak pains, and not succeeding, and being afraid that the patient would lose her life if not soon relieved, I introduced the two curved crotchets, and delivered her in the same manner as in the former case. The head was smaller, and not stretched to so great a length; it came easily out below the pubes, without my being obliged, in the extracting, to turn the chin below the share-bone. The crotchets had made a large opening in each of the parietal bones near the vertex, which allowed the greatest part of the contents to evacuate, so that the head was diminished, and came along with less difficulty.

The woman complained afterwards of great pain, both at the sacrum and pubes, which seemed to proceed from over-straining the ligaments of these bones; but by keeping her quiet, and promoting plentiful sweats, she at last recovered.



## C A S E XIII.

*A laborious one; the pelvis narrow, the head large; delivered with the crotchet.*

A MIDWIFE called me to a chairman's wife, who had been delivered four times by different gentlemen, who could not save any of the children. On examining, I felt the head of the child above the brim of the pelvis, and kept forward over the pubes by the jutting in of the upper part of the sacrum and the last vertebra of the loins, which formed a very acute angle. Although the woman had been three days in strong labour, yet she seemed to be in no danger; and as she had got little sleep, I ordered her a draught with tinct. thebaic. gr. xx. and syr. c meconio ʒij. and desired she might be kept as still as possible.

Being called again next morning, I found the head advanced a little lower in the basin; but as her pains were still good, and as she had got little sleep with the former draught, I ordered the same to be repeated; and leaving one of my pupils with her, desired him and the midwife to send for me if they found it necessary. They sent for me about eleven at night, giving me notice that the patient had slept every now and then betwixt the pains, which were strong; but as they were now abated, the woman much exhausted, and no hopes of the delivery; they thought my assistance was necessary. Near half of the head was now squeezed down in a flat form at the distorted brim of the pelvis. By my encouraging the patient, and giving her some warm wine, her strength and spirits were recruited, and the pains grew stronger. I attended several hours, in hopes that the head would advance lower, and that if not delivered with the pains, yet there might be a chance of saving the fœtus with the forceps; for it would have been impossible to have brought it alive by turning in so narrow a pelvis. Finding at last the woman and pains grew weaker, and that the head still continued in the same position, the patient also begging to be relieved, and calling upon me, if possible, to save the infant, I thought it would be cruel to delay my assistance longer; and resolved to do all in my power to save the mother and the child also.

As she lay on her left side across the bed, I gradually stretched open the os externum, and introducing the fingers of my left-hand along the left side of the sacrum, found the jutting in of the lower vertebra of the loins kept the bulk of the head forward over the ossa pubis; I perceived also the head was large and much ossified, and that the os frontis was to the left side of the pelvis. Although I had small hopes of succeeding, yet I tried if the child possibly could be saved by delivering with the forceps, and first introduced the short kind; but the distortion of the pelvis prevented their taking a proper hold; and when I attempted to extract, they slipped off the head; then I introduced a longer pair that were bent to the side. *Vide collect. xxxiv. case x. and supplement to case v.*

As one of the ears was to the pubes, and the other above the projection of the distorted bones at the back part of the pelvis, I was obliged to fix one blade over the os frontis, and the other over the os occipitis, by which means I obtained a firm hold, as the bending of the forceps fitted the curvature of the sacrum; but as the biggest part of the head was still above the brim of the pelvis, it was not in my power to move it down from that position. Finding it was in vain to try this method longer, and being afraid lest the parts of the woman should be so bruised as to occasion a mortification,

tification, I withdrew the forceps, and resolved to use the last resource and most disagreeable method, to save her life.

As none of the futures presented so as to enable me to make an opening through one of them, I was obliged to make a perforation with the scissars through one of the parietal bones, into which having introduced two of my fingers and a crotchet, I endeavoured to deliver; but not having a sufficient hold, I withdrew the instrument. Recollecting, that as the forehead was to the left side, a perforation would be much easier made at the fontanel and sagittal suture, I introduced my fingers and curved crotchet, with the same precaution as before. The last vertebra of the loins jutted in so much, that I was obliged to move the instrument more toward the pubes, the point turning a little to one side, I moved it again close to the head, to prevent its hurting the patient. When I began to pull, the instrument began to slip, and the point again to alter, on which I advanced it much higher than before, and placed it right; then I began to extract first in a gentle manner, until I found there was a firm hold; afterwards, with much fatigue and force, I delivered the head; although not before the frontal, parietal, and occipital bones were extracted. In this operation I was obliged to alter the crotchet several times, and the last fixture of it that succeeded was on the lower jaw. Not being able to deliver the body with my hands, I was obliged to take the assistance of the crotchet to diminish the bulk of the body also. The woman recovered well, considering the length of the labour, and the force used before she could be delivered.

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C A S E XIV.

*A delivery with the crotchet; described in a letter from Mr. R. P. dated W.*

S I R,

ACCORDING to your desire, I send an account of a late occurrence in the branch for which I am indebted to you for instructions. I hope you will favour me with an answer, and your opinion of the following case:—About a fortnight ago, a poor woman, come to her full time of a second child, by accident received a fall, which occasioned much uneasiness; but no symptoms of labour appeared till yesterday about eight o'clock in the morning, when the membranes broke, and the waters discharged in great quantity. At three in the afternoon the pains came on pretty fast; the midwife was sent for; and, as she says, finding things above her reach, sent in an hour after for an old practitioner who lived in the neighbourhood, and who, upon the score of a little prospect of gain, sent away the messenger. He came to me about six or seven; I went with him; I found, on examining, a large arm in the passage, and the head which I thought also very big, presenting with the forehead sideways, but turned a little toward the os pubis. The pains had entirely ceased; I put her in a right position, to try to turn the child: with some difficulty I introduced my hand, to search for the feet, but found none near. My hand was very strongly pressed with a prodigious stricture and compression of the parts; however, I got to the groin, and found the legs and feet extended up in a straight line, so as I could not possibly reach them. I then returned to the head, and endeavoured to push it upward, but the pressure was so great against me, that I found it impracticable. I told them the difficulty, which the midwife likewise affirmed; and being at a little pause, she proposed calling a neighbouring surgeon, who had some little knowledge that

way. As I was a stranger, and newly begun to practise, I was glad to have one to consult with in this dangerous case. When he came, I told him every thing that had happened; and, after examining, concluded, that it was impossible to deliver by turning. We then agreed, as it was uncertain whether the child was dead or not, to try one blade of the forceps, which I passed up under the os pubis with some violence; but receiving no advantage from this, I gave him the same to hold, and introduced a crotchet, as I thought, into the eye, but it proved to be the mouth; and, at the time when he pressed the head from the os pubis, I extracted. My hold broke once or twice; till at last, I suppose, fixing in the maxilla inferior, we succeeded in the attempt. Some little flooding had appeared all the while; I forgot to mention, that when we came to the desperate work, and found the arm obstructed us much, I twisted the same off from the shoulder. No signs of life appeared in the child; but it was very large. The woman was afterwards as well or better than could be expected. The uterus, in the attempt to turn, felt as if it had lost its oval or round figure, and seemed as if it inclosed the fœtus like a sheath. I was about an hour and a half with her; the waters had been gone twelve or fourteen hours. This, Sir, is a genuine account of a method I was very unwilling to use, especially with a crotchet. Your answer will greatly add to my former obligations.—*Quere*, Whether an attempt should not have been made immediately when the membranes broke?

*The Answer was much to the following purport.*

SIR,

NO doubt, if you had been called in sooner, there would have been a greater probability that you could have turned the child, especially if all the waters did not come off at once; but if all the waters came off before the arm and head were locked close in the upper part of the pelvis to keep them up, the difficulty would have been as great at first as after. What you observe about the uterus is right; for when the child's head presents, and the breech and legs are extended up to the fundus, the uterus embraces the child like a long sheath, lying up and down in the abdomen; but when the child presents with any other part than the head, then it is more of a globular figure, and the child can be easier turned. I think you acted very right in first making a trial to turn, and when you could not succeed, to try if one blade of the forceps would assist, especially when the arm was down; though I seldom find that one blade does much service, or is so certain a method as when both are applied. No doubt also, as you could not deliver, and the arm was so big as to hinder your operating, it was necessary to take it off. You do not mention if you opened the head before you extracted with the crotchet, because this always lessens its bigness, and allows it to come along with greater ease; but perhaps that was unnecessary after the arm was out of the way; and it is also probable that both blades of the forceps could not be applied before that limb was taken off.

#### C A S E XV.

MR. J. was sent for to a woman who had been several hours in labour; and although she had strong pains, the head still stopped at the upper part of the pelvis, and did not advance. After putting his patient in a proper position, he introduced both blades of the forceps; and having slipped them up on each side of the child's head, and locked the handles together, he



he began to pull along with a considerable force. As the forehead lay to one side of the pelvis, he tried to turn it back to the sacrum; but it could not be moved, being so firmly fixed in the upper part of the pelvis. This method not succeeding, he brought out the forceps, and resolved to turn the fœtus, and deliver by extracting it by the feet. This being the woman's first child, he found the os externum so rigid that it required many efforts, during every pain, before it could be dilated; this being effected, he endeavoured to force with his hand the head of the child back into the uterus, so as to allow sufficient room to come at the feet. After repeated trials, he could not with all his strength raise the head so as to pass his hand on one side of it; however, during these efforts, he found the last vertebra of the loins project more forward than common.

In consequence of this observation, he desisted; fearing, that if it should turn the child, it would be impossible to save it, on account of the great force it would require to bring the head through the narrow pelvis, exclusive of the risk the mother might run of a laceration of the uterus before the feet could be brought down. Having fatigued both the woman and himself, he took some respite; then opening the head, introduced the crotchet at the back part of the pelvis, and fixing it above the chin, as he perceived after the delivery, he tried to bring down the head; but by this purchase it was prevented, and forced against the upper part of the bones of the pubes. Having withdrawn the instrument, he introduced it along the side of the pelvis, and moving it gently to the pubes, fixed the point on the side of the occiput; there finding a firm hold, he insinuated two fingers of his other hand into the opening; then pulling and exerting great force with both hands, he at last delivered the head, and the body followed with little difficulty. The patient was strong, and behaved with great courage all the time, though she complained of great pain in the parts: she was not lacerated in the least, and recovered much sooner and better than he expected. He observed, that the opening was through one of the bregmata; that his fingers, when introduced, were violently squeezed as the head came down, and desired my opinion of his management of this, as well as the other two cases he had sent me, which were more successful.

*Answer to the above letter.*

SIR,

YOUR succeeding so well with the forceps in the two cases, where the heads of both children were come down to the lower part of the pelvis, I am afraid ran you into an error in trying them too soon in the last. You write me, that the head was high in the pelvis; that it was the woman's first child; that she had only been several hours instead of days in labour; was strong, and had vigorous pains; and that although you supposed the pelvis was narrow, yet the head was brought along with the assistance of the crotchet; that the opening was small, and the body easily delivered. All these circumstances plainly show, that you ought to have waited with patience to observe what these good pains would have done; for if the pelvis is narrow, it takes a long time before the head can be moulded to its form, and squeezed through it, more especially in a first child, where the os uteri, vagina, and external parts, are more rigid, and commonly take up more time to dilate. I am certain, when you attended me, in all the courtes, insisted much on the precaution necessary as to the management of natural and tedious labours; knowing from experience, that young practitioners are apter to err in these than in the preternatural; and I always begged them to attend every labour,

as it was too common for the gentlemen to neglect coming, except in the preternatural, or where it was absolutely necessary to use instruments. Besides, the attending an old practitioner, where labours are lingering and doubtful, teaches us how long to allow them to go on without endangering the patient, and when it is absolutely necessary to give more effectual assistance, I assure you I have been oftener puzzled in these, than in any other: for, as in other parts of surgery, it requires more skill to prevent, than to perform an operation.

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### CASES XVI. and XVII.

*Two cases delivered with the crotchet; from Mr. J. at D.*

I HAD the honour of attending your lectures. When I left London, you was so kind as to desire me to let you know if any particular case occurred to me in the practice of midwifery, or any in which I found any difficulty. I have met nothing new but two cases, in which I found great difficulty. The one was when the arm presented without the labia, the shoulder was far advanced, and the head and feet were firmly locked high in the pelvis. The woman had been some days in labour: I endeavoured all I could to get at the feet, but it was not in my power. After opening the chest and abdomen, I was obliged to bring away the child double, which was pretty easily done, as the child had been some time dead. The woman recovered very well.

The other case was where the head was far advanced into the hollow of the pelvis, but stuck at the shoulders above these bones. I did endeavour to deliver her with the forceps, having introduced them twice. They would not hold, which I thought was owing to the looseness of the bones of the skull. The child had been some time dead, and the woman long in labour, and in a low way. I delivered her with the crotchet. I told her friends I did not think she could live till she was delivered, but she lived for half an hour after,

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### CASE XVIII.

*The head prematurely opened by a practitioner; mentioned in a letter from Mess. B. and L. of B.*

SIR,

AS we derive all our little knowledge in midwifery from you, we hope you will think we have a right to consult you in any thing relative to it; therefore have sent for your inspection, and our satisfaction or improvement, a case which happened at Sudbury, attended with the following circumstances: The woman was rather of a robust strong constitution, large, straight, and seemingly well proportioned. She was in labour about six or seven hours, pains very severe, but not very frequent, nor any signs of flooding; at which time she sends for one who pretends to practice midwifery (more from impatience and inclination, than any sort of necessity) who fancied, as soon as he came, that something must be immediately done, and therefore proceeded to show his inimitable dexterity, by making the wound you now see, with a common pair of scissors, as soon as he could possibly reach the unhappy babe. We hope you will give us your opinion candidly, as you have always done hitherto, whether you think the child might have been saved, or was treated according to the rules of art. We apprehend the child's face was to the mother's right ilium, and not very low down; consequently, as Mr. Oald observes, we cannot see any material use this opening could be

of, as no crotchet was employed, the contents not evacuated, nor the opening large enough for the futures to collapse much, he at last bringing it along with one of his fingers. We both hope, for our own satisfaction and improvement, to have your opinion whether we have made a right judgment. We are, with great respect, sir, your's, &c.

M. B. and T. L.

P. S. Your opinion returned with the foetus as soon as possible, will give great satisfaction.

*The answer.*

GENTLEMEN,

I Received your's with a box. After examining the child, and considering your letter, I cannot help thinking that the gentleman was too hasty in the operation. The woman had been safely delivered before, at this time was strong, had strong pains, only six hours in labour, the head when opened coming along only with the assistance of his fingers in the opening. These strong pains, without the cerebrum being discharged, or the head squeezed into a longish form, show plainly that they might have been sufficient for the delivery. The design of opening is to let out the contents, that the head may be diminished in its bulk when too large to pass; and if this had been the case, such an operation should not be attempted, unless the woman's pains and strength began to fail. I had a case, the woman very big with her first child; the labour began at four in the morning; she had strong pains, and was safely delivered of a large child about eight at night. The head stuck in the pelvis, was squeezed to a great length, but by the assistance of the forceps was saved. However, no practitioner can judge of these matters, unless he had been present, because he can seldom rely on any accounts, and we ought always to judge on the charitable side, especially as none of us are perfect; and if this gentleman has acted imprudently, it should be a lesson for you and me to act in a contrary manner, which will always in the end turn to our advantage. The person that brought the box was to call next day, if not, you will write to me what is to be done with it, because it will soon spoil. Excuse this hurrying answer from gentlemen, your's, &c.

W. S.

The foetus these gentlemen sent me, was as large as any I had seen, the opening at or near the vertex, and the head of a round globular figure; from which circumstances it appears that it had not been squeezed down into the pelvis, but lying above the brim; that the gentleman, either from great ignorance of his profession, or hurry of other business, which last is a most shocking reason, did certainly act the part of a bad accoucheur.

#### CASE XIX.

**D**R. W. was called to a woman in labour of her tenth child; the membranes had been broken, and all the waters discharged many hours. The head of the child was advanced to the lower part of the pelvis, the forehead to the pubes, and the funis umbilicalis without the external parts. In which the circulation had been obstructed by the pressure of the head, a certain proof that the child was dead.

Having failed in this attempt to deliver with the forceps, he could not, with all his force, extract the head, even after he had opened it, until several bones of the cranium were torn out with the crotchet.

Having



Having delivered the head, he was obliged to fix the blunt-hook in the arm-pit; to bring down the shoulders, and even after that, it required great force to deliver the abdomen, which was much swelled.

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C A S E XX.

**M**R. I. was called to a woman who had formerly been delivered of four children, none of whom could be saved; she at this time had been long in labour.

On examining, he found the pelvis very narrow, the forehead, in place of the vertex, presented; the arm was also protruded through the labia. He waited a considerable time to try what the labour-pains would do with the usual assistance of the hand, that the child, if still alive, might be saved. As the woman grew gradually weaker, and the pains had no effect, he made a large opening in the cranium; and by dint of considerable force, extracted the same with the forceps.

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C A S E S XXI. and XXII.

*Communicated in a letter from Mr. H. dated C.*

**T**HE woman's pelvis being small, she had been delivered in a former labour with great difficulty; on which account, when he was called to attend at this time, he waited many hours, in hopes that the pains would force the head lower down into the pelvis. At last, the patient, all on a sudden, was taken with frequent faintings; her strength failing, and the pains growing weaker, he was afraid of delaying his assistance too long. As the head was too high to attempt assisting with the forceps, the pelvis too small, and the woman too weak to venture turning, he perforated, and made a large opening in the cranium, from which issued a large quantity of bloody serum; after this discharge, he, with the assistance of the weak pains, and his fingers in the opening, delivered the woman, and no bad consequence ensued.

He was called to a woman in labour of a first child. The midwife informed him, that the membranes had been broken, and the patient in a lingering way for five days, but that she had now grown weak, and the pains, that had been strong, were entirely gone off. As the head presented, he first tried to turn, and deliver in that manner, then he used the forceps.

Both these attempts failing, he opened the head, introduced a crotchet with great caution, and brought out some of the bones of the cranium; at last he was obliged to introduce a curved crotchet on each side, which had the desired effect. After delivery, on examining the child's body, it plainly appeared to have been dead many days, for the belly was of a livid colour, and the scarf-skin stripped off in the handling.

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C A S E XXIII.

*In a letter from Mr. H. dated B. Essex.*

**H**E informs me, that since the attending my courses of midwifery in London, he had been called to many cases in that branch of business, and was successful in all of them except the following, an account of which he now sent me.

The face of the child presented at the lower part of the pelvis, the forehead to the right ischium, and the membranes had been broken several hours before his arrival. He first endeavoured to push up the head so as to bring the child footing, but it was so wedged in the bones, that he could not move it. He next tried to deliver with the forceps, which also disappointed his expectations; at last he was driven to the dernier resource, that of diminishing the head.

As he could not perforate the bones of the face and forehead, to make an opening through these parts, he introduced a crotchet above the temporal bone, and at length, after six hours fatigue in trying these different ways, he delivered the patient. He observes, that in time of operating, he several times called to mind an expression which he once heard me use, viz. "That students should never think themselves perfect, for after all the instructions that could possibly be conveyed, there were many things in midwifery which could only be learned by practice and observation; and that cases would sometimes occur which would puzzle and foil the best practitioners." As my correspondent mentions nothing of the strength of the woman, and the force of the pains, I take it for granted, that he did not begin to operate till there was no hope of delivery by the efforts of nature, as the methods he used to effect delivery, should never be attempted but in the last extremity. What surprises me, is the great length of time he was at work, and the fatigue he underwent before he could deliver the patient, unless he desisted a long time betwixt every trial, and only extracted in a slow manner, and by intervals.

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C A S E XXIV.

*From Mr. B——, dated B——.*

S I R,

I WAS called to a woman who had been extremely hearty during her pregnancy, was indulged in eating even to excess, and was uncommonly big. When she was in labour, the midwife had promised a speedy delivery from nine in the morning till ten at night. When called, I found the head presenting, and imagined in a good situation to assist with the forceps; but after introducing them, I could not with all my strength move or deliver the head, neither could I push up my hand into the uterus to deliver the child by the feet.

I next tried to extract the head with a crotchet; this proved unsuccessful also; at last, after four hours working to no purpose, and a flooding coming on, I perforated the skull, and delivered the child, and the woman recovered.

I beg your remarks, and your opinion, if waiting in such a case would not have been dangerous for the woman. The child was very big, and weighed sixteen pounds.

*The answer was much to this purpose.*

S I R,

AFTER examining all the three cases you sent me, I doubt your success in them has been the occasion of your trusting too much to good fortune in the fourth, where you was obliged to deliver with the crotchet, which I am afraid proceeded from trying both to deliver with the forceps, and to turn the child before it was absolutely necessary. You do not describe the state of

of your patient when you was called. If she was much weakened and exhausted from the length of the labour, the pains lingering, and no hopes of delivery from them, you was in the right to try the two first methods to save the child; and after these, if the woman was in absolute danger of her life, you are excusable for having recourse to the last expedient. When you found the head would not come along with the assistance of the crotchet, you should have opened it immediately, that the contents might be discharged and the head diminished. This would have saved the time and fatigue you mention. I hope this unsuccessful attempt will be a caution against using the forceps too soon. Attempts to turn the child with great force, when the head is engaged in the pelvis, and all the waters are discharged from the uterus, frequently loosen the placenta, and bring on a flooding, such as you describe.

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C A S E XXV.

*Communicated in a letter from G. L. dated S.*

S I R,

I WAS called to a woman of fifty years of age, in labour of her first child, with a pelvis excessively narrow. The patient had been long in labour, was very weak, and the pains had abated. After stretching the external parts, I could not introduce my hand through the bones of the pelvis; however, in this trial, I felt, with my fingers, that the head presented. On opening the head, more than a quart of fetid serum was discharged. I then introduced two fingers, and along them a crotchet, and got a firm hold with the instrument on the os petrosum. After having endeavoured, with all my force, to extract the head with both hands, one at the instrument, and the fingers of my other in the opening, I could not move it until I introduced another crotchet on the opposite part of the cranium; by pulling at both these instruments, some of the bones were loosened, and came away with the crotchets. I then with the scissars cut in pieces the whole of the cranium, which, with two or three fingers, I extracted piece by piece; afterwards, by the assistance of the blunt-hook, I brought down the shoulder, and separated it from the body. I was obliged in the same manner to extract every part of the child.

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C A S E XXVI.

*A letter from a practitioner in midwifery, in London.*

S I R,

A YOUNG gentleman called me to a poor woman in St. Giles's, at eight o'clock at night, and informed me, that he and some others had been sent for by a midwife about an hour before; that the woman had been several days in labour, and was seemingly much exhausted. I went immediately with him to the place. The gentleman, as the hairy scalp was tumified, imagined that the breech presented; but, upon examination, I found it was the head with one of the hands, and I perceived the pelvis of the woman was very narrow. She told me, she had been delivered twice before by gentlemen, of dead children. Upon this information, and as she still had strength and frequent small pains, and complained that she had enjoyed no sleep for two nights before, I ordered her an opiate. This precaution being taken, we left her to the care of the midwife, desiring the patient might



might be kept as still as possible, in hope she might get some rest. We were again called early next morning, and found her quite worn out with the pains and want of sleep, and the head of the fœtus not in the least advanced. Being afraid, if I delayed the delivery longer, that a mortification might soon invade the parts of the woman, from the continued pressure of the child's head, I opened this last with the scissars, and enlarged the perforation. This being done, I introduced the curved crotchet within the skull, mounted with the sheath, to prevent the sharp point hurting the patient, if it should slip in pulling. Having destroyed the structure of the cerebrium and cerebellum, that they might pass off, so as to diminish the head, and finding I had a good hold in the inside with that instrument, I pulled with one hand at that, and with the fingers of the other in the opening, by which means I extracted both the parietal bones; but although I exerted all my strength, and a great part of the contents were discharged, yet the head was not moved an inch lower. Failing in the above attempt, and finding I could not introduce my fingers, to direct the sharp crotchet on the outside of the head, on account of the narrow pelvis, and the arms filling up the vagina, I was obliged to twist off the limb from the shoulder. This was pretty easily effected, as the child had been for some time dead, which plainly appeared from the skin stripping off from that member. After removing the arm, I even then with much difficulty introduced my fingers, and along them the crotchet, and got the point fixed above the chin; then pulling with great force, and with both hands, in the same manner as before, the head began to move down within the projection of the distorted bones; and I continued pulling it till it was entirely delivered. The body followed, without the use of the crotchet, but not without using great force. The distance, so far as I could judge, did not exceed two inches and a half from the jutting forward of the upper part of the sacrum to the pubes. Although the woman had suffered so much from the length of the labour, as well as from the great force used at the delivery, yet she recovered better than could have been expected, and is now quite well.—He also writes in the same letter, that he was called lately to a patient about forty years of age, in labour of her first child. The hymen shut up the passage into the vagina, and was ruptured by the head of the child, so that the patient had an easy delivery.

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C A S E XXVII.

A LETTER from a gentleman near London, contains the history of a laborious case, in which he honestly owns he prematurely tried to deliver with the forceps; but the head of the fœtus being too high in a narrow pelvis, that method did not succeed; he then administered an opiate, to procure some rest and allay the violence of her pains, as she had been much fatigued. Being called on other business at some distance, he did not see her before the following day, when he found her much exhausted by the labour; and being again called to another patient, he was afraid of her dying if he did not deliver the child before he went away. As the head was not advanced, so as to promise any success from the forceps, he was obliged to use the disagreeable method of opening the cranium, through a large tumour of the hairy scalp; after which, with the assistance of the blunt-crotchet, he extracted the child, but with greater difficulty than he expected, as it was very large. He takes occasion to lament the condition of poor women who live at a distance from assistance, in the country, and the dismal situation

of practitioners, who are seldom called in time, and, even when properly called, prevented, by a hurry of other business, from giving due attendance. This is too frequently the occasion of tempting them to operate, before it is absolutely necessary; on which account, he says, he is resolved to attend none but patients whom he can deliberately attend, and leave such cruel methods to more obdurate practitioners in his neighbourhood.

### C A S E XXVIII.

*An account of the sides of the os uteri grown together in a woman with child, by Thomas Simpson, M. D. professor of medicine in the University of St. Andrews.*

A WOMAN, forty years of age, observably narrow between the os pubis and os sacrum, had been four days in severe labour of her first child, when I was called to assist her. The child appearing to have been dead for some time, I opened its head, and extracted it, but with great difficulty; its shoulders and haunches being too large to pass in the straitened passage between the bones. During some days after her delivery, she passed a great many small rugged stones by the urethra; and at length, after her urine had been stopped some time, her husband drew out of the urethra a large piece of thick membranous substance, three inches in length, and in some parts two inches broad; one side of it was covered with a crust of small sharp stones, the other side was inflamed and bloody, which made me judge it to be part of the coats of the bladder separated; and I was confirmed in this opinion by introducing a catheter into the bladder; for whenever it touched certain parts of the sides of the bladder, blood came with the urine. The patient continued a long time with a plentiful suppuration about the pudenda, but we did not suspect that the pus came from the external parts, but only from the exterior, which had been somewhat lacerated. About three months after delivery she fell again with child, and took her pains after the ordinary period. She continued two days in hard labour before I saw her. The midwife then informed me, that the inner orifice had yielded nothing; I left her half a day, and things remaining in the same way at my return, I examined her condition, and found that the os tincæ had not only not yielded, but that the sides of it were grown together, without any vestige of a passage; whereupon I asked the assistance of another physician, and Dr. Haddow being called, was, as well as the midwife, sensible of the case being such as I judged it to be; wherefore we agreed to make an incision into the os uteri, but we were first obliged to dilate the vagina sufficiently, that we might operate more securely. We had no *speculum matricis*, and therefore it was necessary to supply it by some other instruments. We tried to make the dilatation with a pair of long broad-bladed forceps; but they neither had strength to dilate sufficiently, nor did they keep the vagina equally open. After this we caused two pieces of wood, each three inches long and two and a half broad, to be made, concave on one side, and convex on the other, and of no more thickness than we thought would be sufficient to be a strong enough pressure by the necessary dilatation. When these were finely polished and greased, I introduced them into the vagina, with the concave faces to each other; then sliding in the legs of a *speculum oris* between them, and turning its screw, I separated the pieces of wood so far as we could see distinctly the cicatrix of the parts grown together, and could have easy access to divide them; which I did by an incision at least half

half an inch deep, before I pierced through the substance of this part of the womb; then immediately introducing my finger at this wound, I touched the head of the child, and felt the whole circumference of the passage hard, like a cartilage, which yielded nothing to several throws she had after the incision, so that I was obliged to guide a narrow-bladed scalpel with my finger, to make several incisions into this cartilaginous ring: in doing this, there was not the least appearance of blood, and the patient had no trouble, except what the dilatation of the vagina gave her.

The labour continuing, the passage dilated a little, but not so much as to give any hopes of its allowing the child's head to pass, notwithstanding the bones of the cranium were over-lopped; and therefore I was obliged to bring away the child as I had done the former. In this birth there was no liquid with the child, nor did any blood follow it; it was quite supple, and had a white chalky crust over its whole body; so that we were convinced it had been dead for some time. The want of waters was some surprise, till I recollected, that, in the time of labour, she told us they were passing; at which time I had the curiosity to make strict observation, and found what she called the waters, passed by the urethra, which opened externally by three different orifices; this, with her having lost such a portion of the bladder formerly, and her being subject to the gravel, gave me ground to think there was some communication between these passages and the cavity of the womb above the os tincae, which had allowed the waters to be evacuated. I was the more inclined to entertain this supposition, because frequent instances have been observed of stones making their way through the neighbouring parts, as happened to a boy in this neighbourhood, who passed a very long stone, which had lodged long in the bladder, by the anus, by which the urine had its course for some time after.

My patient, immediately after being put to bed, was seized with a pleuritic pain, very high fever, and difficult breathing, which coming on so soon after her being fatigued several days with hard labour, during which she slept none, but drank much of every thing in her way, appeared to me rather the cause of her death in twenty-four hours after, than any consequence of the incision I had made, for she never complained of uneasiness in those parts, nor had any hæmorrhage. Notwithstanding all the solicitations I could use with her relations, I could not prevail with them to allow me to open her body.—*Vide collect. xxxv. case viii. x. xvi. and collect. xl. case viii. collect. xxxix. No. i. case iii.*

## COLLECTION XXXII.

*Of preternatural labours, in which the legs or breech presented in place of the head.*

[Vide Part i. Book iii. Chap. iv. Sect. i. ii.---Tab. xxix. xxx. xxxi. xxxii. xxxiii. xxxiv. and xxxv.]

### C A S E I.

**A** MIDWIFE sent for me to assist in a labour. The legs of the fœtus were forced down through the os uteri into the vagina immediately after the membranes broke, and she had tried to bring down the child's body by pulling. After stretching the os externum, I introduced



duced my hand into the vagina, and up along the thighs of the child to within the os internum, where I found the breast and chin squeezed down at the left side, just above the brim of the pelvis. I took hold of the feet with my other hand, which were without the os externum, and pulled at them, while at the same time I pushed up the breast and head to the fundus uteri, with the hand that was introduced at first.

Finding that the breast came lower, and that the pushed-up parts did not return, I withdrew my hand from the uterus, and having wrapped a cloth round the legs, pulled at them with both hands, till I brought down the breech to the os externum.

As the belly of the fœtus was to the left side of the pelvis, I turned it back to the sacrum; and though I tried to deliver without bringing down the arms, yet I found the shoulders so large, that I was obliged to introduce a finger over one of them, and along the arm.

This I slipped down gently into the concavity of the sacrum, and brought it out through the external parts with a semicircular turn, to prevent a fracture in the extraction.

Then I brought the body lower, but finding that the head stopped at the upper part of the pelvis, I insinuated my hand up along the breast, and introduced a finger into the mouth, and by pulling gently, brought the forehead into the concave part of the sacrum; being afraid of over-straining the under jaw, I quitted that hold, and placed a finger on each side of the nose; then I laid the body of the child on that arm, and by slipping the fingers of my other hand over the shoulders, and on each side of the neck, I got the head safely extracted. The patient was laid on her back across the bed, her breech to the side, and two women supported her legs; in delivering, I at last was obliged to raise up the child's body, so as to bring out the head with a half-round turn upward, to prevent the perinæum being torn, as these parts were forced outward in form of a large tumour; by which precaution both the mother and child were safely delivered.—*Vide collect.* xxxv. case i.

## CASES II. and III.

**B**EING sent for to a woman in labour, the midwife told me, that at her first examining, and even after the membranes were broke, she could not distinguish what part of the child presented, until the pains forced it lower and lower, and then, both by the discharge of the meconium and the touch, she found that the breech presented; but having waited several hours in expectation of the delivery, and at last being afraid of the child's life, she had recourse to my assistance,

On examining, I found the nates at the lower part of the pelvis, and in a right position, with the thighs to the sacrum; as the pains were now weak, and expecting it would require considerable force to deliver the child, I caused the patient to be laid in a supine position, as in the preceding case.

In time of the pains, I gradually stretched the frænum labiorum with my fingers, then standing up, turning the back of my hand downward, and introducing my fingers betwixt the breech and the os coccygis, I tried to raise up the nates, so as to be able to bring down one or both legs.

Although I failed in this attempt, and could not raise the nates so high as to allow my hand to pass up into the uterus, yet this effort gave more room, by stretching the parts, and allowing an easier passage for the child, which I found

I found was very large; and indeed this was the sole occasion of the difficulty.

After bringing down my hand, I introduced the fore and middle finger of each into the outside of each groin, betwixt the thighs and body of the child; with the assistance of this hold, and pulling from side to side, and upward, to prevent the perinæum being torn, I at last brought the hips through the os externum, at several efforts, and by the assistance of the weak pains; after which, and with much fatigue, I brought down the arms, and delivered the head as in the former case.

Although I used all precaution in delivering the head, and indeed exerted less force than in the former case, yet the child was dead, a circumstance which seemed to proceed from the long pressure of the funis, by its being tumified and squeezed of a flattish form near the navel.

I was called to a patient who had been in labour most part of the night, and did not send till the membranes were broken. The breech presented; the thighs were to the right side of the pelvis; the right hip was forced down in the back part, and the left stuck above the ossa pubis. As this was her first child, I waited with patience, in hopes that both hips would advance gradually, and stretch the vagina and external parts: but the meconium having come down in great quantity, the woman also being much fatigued, and the pains abating about noon, I was afraid, if I delayed assistance any longer, the child would be lost.

Finding that the delivery was principally retarded by the hip sticking above the pubes, I dilated the os externum a little, and after introducing two of my fingers betwixt the pubes and the hip, pressed and moved it in time of a pain to the right side of the pelvis: this endeavour immediately altered the former position, by bringing the thighs to each side of the sacrum. The child being small, was forced lower and lower every pain; the body and head were delivered without my being obliged to bring down the arms, as in the former case.

The woman lay in bed on her left side; and as the head was small, I delivered it according to Daventer's method, by fixing the fingers of my right hand over the shoulders, and on each side of the child's neck, then taking hold of the body with my left, and pulling with both hands backward to the patient's breech, I brought out the occiput and vertex from below the pubes, while the chin was within the lower and back part of the vagina, to prevent tearing the fourchette, which felt very rigid.

#### C A S E IV.

*A breech case, from Dr. Tatwell, physician, of Stamford.*

A WOMAN, aged 32, having gone her time with her first child, some slight pains came on, and the waters broke, after which the pains went off for a fortnight, then came on again, and the faces of the child were observed by the midwife to come away.

Upon examination, I found one of the hips present, but the os internum not being open enough, and the pains only slight, I directed some thebaic drops, with tincture of castor, and warm sippings, ordering the woman to compose herself, and if any change happened, to send to me again.

In a few hours the pains were so increased, and the os internum so opened, that when I was fetched back, I found the nates of the child squeezed out, which I helped forward to the hams, then got out the legs, and after giving

giving a quarter-turn to bring the head right in the pelvis, got down the arms, delivered the head, and, with a little assistance, the placenta.

No pulsation could be perceived in the umbilical cord, though the mother thought she had felt the child stir that morning; but probably the same pressure on the abdomen of the child, which had brought away the meconium, stopped at the same time the circulation of the navel-string.

Every thing went on right after delivery, by the help of a few drops above-mentioned, and the woman got well at the usual time.

#### C A S E V.

**I** ASSISTED in a case much of the same kind as the preceding, but was obliged to bring down the body in a different manner; for when called, I found the breech presented low in the pelvis, and the thighs to the left side. The midwife told me that it had been long in that position, that she could not move it, after repeated trials and strong pains. As the patient lay on her left side, I tried to raise the breech with my right hand, so as to bring down the legs; but the contraction of the uterus being so great against me, I could not move it up sufficiently for that purpose; however, by this trial I did some service, in opening the os externum, and likewise felt a pulsation in the navel-string, as it lay secure betwixt the thighs, which kept it from being pressed. The ischium being much lower than the pubes, I durst not venture to bring down the thighs at that part, neither did I choose to pull the body farther down to make more room, for fear of engaging the shoulders too low in the pelvis, which would prevent my turning the fore parts of the child to the back parts of the uterus; but I turned up the right thigh from the ischium to the pubes, by which means I easily got hold of the joint at the knee, and brought down that leg, and after that delivered the other leg in the same manner. I had tried before this to turn the breech with my fingers of both hands, on the outside of the groins, both backward and forward, but the breech being large, and firmly locked in the pelvis, I could not move the thighs in that manner either to the sacrum or pubes. After I brought down the thighs and breech to the os externum, a strong pain came on sooner than I expected, and pushed down the body to the shoulders, before I was aware, into the pelvis. After wrapping a cloth round the child's hips, I tried to turn the fore parts to the back parts of the patient, but could not move it till I forced up the body again to the hips; by that means the shoulders were disengaged, and the belly yielding easier, I got it turned backward. I then delivered the body and head, as in the second case; but the last coming more difficultly, I was obliged to bring down both arms before I could extract the same with safety.

#### C A S E VI.

**I** WAS bespoke to attend a woman in her first child. When I was called, I found that the membranes were pushed down with the waters in time of a pain, and that the mouth of the womb was very thin, and open about the breadth of half-a-crown. As the pain went off, and the membranes grew lax, I pushed up my finger farther, and found some part of the child through them; and although it felt round like the head, yet it was softer at some parts than others, and more unequal, which made me suspect, as it was so high up, that it might be the shoulder: however, as this was her first child,



child, and the parts were very strait, and the patient very young, I thought it more adviseable to wait with patience, to let the parts open in a slow and gradual manner by the membranes and waters. This being in the evening, I left her, and called again about eleven that night. The pains had been but slight, and there was but very little alteration in the mouth of the womb; only I found that the membranes were pushed farther through it. I could now a little more distinctly feel the part that presented, and was pretty certain that it was not the head. I wanted the labour to go on slowly, to allow time for softening and stretching the os uteri; I was also afraid, if the labour was hurried on too fast, especially as I found the membranes pushing down of a longish form, that they would break too soon, or before the os uteri was fully opened. I ordered an anodyne draught, and desired her to go to bed, and to take all the rest possible. In order to amuse her, and keep her from thinking too much upon her situation, I told her that the labour was scarcely begun, and desired the nurse to send for me as soon as the waters came off; however, as the case might turn out difficult for the patient, and dangerous for the child, if not rightly managed, I staid all night without her knowledge, and went to bed in the house.

I was not awaked till the membranes broke, about six in the morning, when I examined, and found the os uteri considerably more open, and not so rigid, and the breech pushed down into it, with the thighs to the pubes. The nurse informed me that the patient had slept betwixt the pains, which grew gradually stronger; but she had not had any since the waters began to come off. I desired she would still keep quiet in bed, thinking that now, perhaps, her sleeps would be longer, and more refreshing, if she continued any time free from pains. Accordingly she enjoyed a good deal of sound sleep, during which she had some slight pains, and some of the waters were discharged.

About ten the pains grew stronger, and more frequent, by which the breech was forced down, and gradually dilated the os uteri to its full extent. I then began to stretch the os externum gently every pain, that I might assist the delivery with greater ease, to prevent the child being lost by its stopping too long when come down to the lower part of the pelvis. As the breech advanced farther, the meconium began to be discharged. The middle of the thighs being then down at the lower part of the pubes, I introduced my finger betwixt them, up the belly, and felt the funis, with a pulsation in it. I then introduced a finger of each hand to the outside of each groin, and helped down the hips lower, till I felt the hams at the under part of the pubes; then taking hold of one of them with the fingers and thumb of each hand, I brought down the legs slowly, first one and then the other.

The limbs being slippery, I introduced a cloth betwixt them and my fingers, to prevent their slipping, and then turned the fore parts of the child to the back parts of the utetus. I had several times found, that after I had turned the child in that manner, the forehead, instead of being backward to the side of the sacrum, was toward the groin, and brought down with great difficulty in that position, unless I could turn it more backward, by pressing it with my fingers; in order to prevent this difficulty, I turned the body a quarter more, which brought the forehead backward, as above, and then delivered as in the former case. The child was alive.

## CASES VII. and VIII.

I WAS called by a midwife to a case where the breech presented much in the same manner as the former. It was the woman's first child, and before I was called she had been many hours in labour after the membranes were broke. The thighs were toward the pubes, and the breech was come down to the lower part of the vagina: the perinæum and fundament were pushed out in form of a large tumour by the breech, which had stopped there for some time, and the woman's pains were grown weak and seldom. As she lay on her side, I dilated the os externum gradually during every pain, and when I could introduce all my fingers, I turned the back of my hand toward the perinæum, to raise the breech; but the woman shrinking away from me, and altering her position, I turned her on her back, as described in collection xxv. No. i. case i. and she being firmly held and supported by assistants, I proceeded without much interruption.

Having dilated the parts, I applied my finger to the outside of each groin, and tried to help along the breech, but could not move it after several efforts. I tried to push up the breech and bring down the legs, but could not raise it above two inches. I afterwards waited some time, to see if the pains would push the breech farther, especially after the parts were so much opened. Finding both them, and the assistance of my fingers ineffectual, and the woman much exhausted, I introduced the large curve of the blunt-hook with my left hand, betwixt the fingers of my right, along on the left hip, and slipped the point in betwixt the thigh and the body of the child, till I found the point past the inside of the groin, betwixt the thighs; then taking hold of the small end of the hook with my right-hand, and applying the fingers of my left-hand to the outside of the opposite groin, I gradually brought the breech lower; but finding it again stop, and that the left hip was brought farther down by the curve than the right, I changed it to that side. After repeated trials, I could not deliver the breech, nor bring the body so low down as to manage the legs. I now withdrew the hook, and with great difficulty passed a garter betwixt the thighs and body, by the help of which the parts advanced, till the joint of the ham came below the pubes; then bringing down the legs and thighs, and wrapping a cloth round them, with great difficulty I turned the back parts of the child to the fore parts of the uterus. I tried to give a quarter-turn more, with the hip up toward the pubes, but could not move it farther; I therefore began to pull along the body of the child, which required greater force than I expected; but at last I delivered the belly, which felt very large; upon which the shoulders and head came easily along. Although I felt (from my not being able to give the hips the quarter-turn) that the chin, instead of being at the side of the pelvis, was toward the left groin, yet as the head was small, I moved it backward, and with my finger in the mouth, brought the forehead to the hollow of the os sacrum, and delivered as in the former cases. When I examined the child, I found that the whole difficulty proceeded from its having been dead, so that the belly was very much swelled, a circumstance which I did not suspect, as both the woman and midwife had assured me they felt the child stir: however, it had been certainly dead several days, for the scarf-skin was livid, and stripped off in several places.

Being called to a woman whose former labours used to be easy, the midwife told me that one of the hips presented; and although the mouth of the womb was largely open, and the patient had been in strong labour, yet the other

other hip did not advance, but stuck above the share-bone. I found the left breech pushed down to the middle and back part of the pelvis, and pretty much swelled; and perceived that the thighs were to the left side, and the right hip above the pubes, as the midwife had said. As the woman had been much fatigued, and her pains were grown weak, I introduced my right-hand, contracted into a conical form, into the vagina, and pushing up the breech higher; made room for my hand to advance along the thighs toward the fundus uteri; finding the legs up toward the fundus, and some water still remained in the uterus; I easily folded down the legs, and after I had brought them and the thighs without the os externum, I turned the belly to the sacrum, and delivered the child, as in the first case.

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C A S E S IX. and X.

**I** WAS called by a midwife to a woman who was in labour of her first child. The right hip was pushed down at the right side of the pelvis; the woman had been long in labour, a great many cloths had been wetted with discharges of blood from the uterus; and although it flowed gradually, and in small quantity, yet the woman was considerably weakened.

As the fore parts of the child were toward the abdomen, I placed her on her side, and gradually, as in the former case, introducing my hand into the vagina, raised the breech; after I had insinuated it up along the left side of the child, I stood more behind the woman, and turned my hand to the fore part of the uterus; but the uterus being strongly contracted, I was obliged to advance very slowly, dilating as I advanced, and then could only bring down the left foot. I was afterwards obliged to push at the breech, and pull at the foot, alternately, before I could bring down the leg and the thigh. This being effected, I wrapped a cloth round the leg, and took hold of it with my right-hand, while at the same time I applied the fingers of my left above the right haunch, on the outside of the groin; and by pulling with both hands, brought down the body, till the ham of the right leg was descended below the pubes. I tried to turn the fore parts of the child backward, but could not till I brought down the right leg.

Finding the child was large, and expecting it would take a good deal of force to deliver the head, I altered the woman's position by turning her on her back; then wrapping a cloth round the thighs and breech, having already turned the fore parts of the child to the back parts of the uterus, I brought it down to the shoulders; but finding it stopped at the head, I introduced my fingers and hand along the breast, and discovered that the obstruction was from the forehead resting against the left arm of the child, at the left side of the sacrum. I then brought down that arm, introduced two fingers into the mouth, and delivered, as in the former cases, though not without a great deal of force; for after I had got the fingers of my right-hand into the mouth, and laid the child's body on that arm, and taken a firm hold over the shoulders with the fingers of my left-hand, I was obliged to increase the force every attempt. Being afraid I should overstrain the jaw, I withdrew my fingers out of the mouth, and tried Davenport's method, by pressing down the shoulders, so as to bring the occiput from below the pubes; the head, however, being too high to be moved by that method, I again had recourse to the former; but advanced my fingers higher, placing them on each side of the nose; I pulled so long, and with so great force before the head was delivered, that I was surprised to find the child alive.



## C A S E X.

**I** WAS bespoke to a woman who had suffered very much in her former labours from the pelvis being distorted. When I was called to her about six in the morning, I found the mouth of the womb largely open, and the membranes pushed down with the waters in time of a strong pain. As the pain went off, and the membranes became lax, I felt plainly through them that the head did not present, but was uncertain whether it was the breech or the shoulder; I could just touch with my finger the projection of the last vertebra of the loins with the upper part of the sacrum. Though concerned that the child did not present fair, I was pleased to find that the pelvis was not quite so narrow as it had been represented.

About an hour after I came, and before the membranes broke, I examined and found them pushed farther down; and as the pain went off, I found that the breech presented. Placing the woman in a convenient position, as described in collect. xxv. No. i. case i. with her head and shoulders lower than her breech, I gradually opened the os externum, and introduced my hand into the vagina as a pain went off. Endeavouring to raise the breech, my fingers broke through the membranes, and as a large quantity of water was retained, I easily brought down the legs, which were to the back parts of the uterus.

After I had brought down the body to the shoulders, I tried to bring the head into the pelvis, by pulling in different directions, viz. upward, downward, and from side to side; but finding I could bring it no farther, I introduced my finger and hand in a flattened form betwixt the breast and back part of the os externum. In advancing farther, I felt the chin and face at the upper part of the os sacrum, the forehead retained above the distorted part formed by the last vertebra of the loins, and the fore-mentioned bone; I tried to pull the forehead down with my fingers placed on each side of the nose, but could not move it; then I pulled down the left arm of the child, and pressed the face and forehead to the left side of the pelvis, where there was more room. I made a second effort to bring down the head in the same manner as before; but as it still stuck, I pulled down the right arm; in a third trial, I brought the forehead down into the hollow of the os sacrum, delivered the head, and saved the child, contrary to expectation.

## C A S E XI.

**I** WAS called by a midwife, and found the breech presenting, and the pelvis distorted. The midwife told me, that the woman's former labours had been very difficult and tedious; but now, as the breech presented, she was afraid the difficulty would be greater; observing, that she had sent for assistance as soon as she found (after the waters came off) the position of the child. As I found the thighs were toward the pubes, I kept the woman as she was then lying on her left side, and brought her breech nearer the side of the bed. Introducing my hand into the vagina, I pushed up the breech of the child, and advanced along the fore parts of the uterus to search for the feet; but finding a greater resistance than I expected from the uterus and child, and perceiving the head and shoulders of the woman lay high, I turned her from the side position to her knees and elbows, without bringing down my hand; by which means her breech was raised higher than the body. I found the resistance diminished and brought down the legs; then turning her to her back, brought down the body. After I had turned the

the fore parts of the child to the back parts of the uterus, I introduced my fingers to the face, as in the former case. Finding it to the left side of the projection, at the upper part of the sacrum, and the right arm lying before it at the left side of the pelvis, I first brought down that, and then helped down the forehead; but before I could deliver the head, I was obliged to bring down the other arm, and saved this child also, though a deal of force was used to deliver the head.

Five minutes elapsed before the child breathed, and it continued much longer breathing weakly, but by the use of stimulants, it began to cry, and continued to cry incessantly, till one of the women observed a large swelling betwixt the left ear and temple. This I immediately pressed with my fingers, on which it ceased crying; but in taking them off, it began again, and the swelling that subsided on pressure returned. To remedy the complaint, I dipped a thick compress in a mixture of oil, spirits, and vinegar; and applying it to the tumour, desired the woman that held the infant, to keep her fingers pressed on the place for a long time. When I examined it next day, the swelling was gone, and it appeared to have been that part which stopped so long at the projection of the upper part of the sacrum, before the head was delivered.

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*C A S E S XII. and XIII.*

**I** WAS called in a great hurry to a woman, and on examining I found the body of the child delivered, and only the head remaining unextricated. The patient was very corpulent, and begged that I would relieve her out of her misery, and if possible save the infant.

I felt no pulsation in the funis umbilicalis; but as that might have been just stopped, I immediately, and with great ease, delivered the head, by introducing my hand betwixt the neck of the child and the back part of the pelvis. I slipped two fingers into the mouth, which was to the left side of the sacrum; by that hold I brought down the face and forehead, turning them at the same time a little more backward into the concave part of the sacrum; then placing the fingers of my other hand over the shoulders, and on each side of the neck, and raising up the body, as the woman was in a supine position, I delivered the head, as described in cases i. and ii. of this collection.

Two of the patient's sisters who were present, finding that the child was dead, expressed their resentment against the midwife, and ordered her out of the room: however, I interposed, and desired that she might first assist in laying the woman right in bed; then I begged to hear the progress of the labour.

As she found the breech present, and had used more force than is commonly exerted, the friends had been alarmed, but were satisfied for a little, when she assured them that the child came in the natural way, and that the patient and child would be soon and safely delivered.

She at first brought down the body and arms easily, with the assistance of the strong pains, but with all her strength she could not deliver the head; and at last was obliged to own to the attendants that the child came wrong; though not before she had made several trials after the first alarm.

I was called by a midwife, who told me that the body of the child had been delivered an hour ago; but not being able to bring out the head, she had desired my assistance. As the pains were now grown stronger, she

begged I would wait a little, and if the patient was not soon delivered, she would introduce me to her. I enquired if she had felt any pulsation in the funis after the body came down; she acknowledged that she had felt it at first, but it had stopped long ago. She was called into the room in a hurry; and the head was immediately delivered with the pains. About an hour after, I was sent for by the same midwife to another woman, where the breech presented, and who formerly was used to have tedious labours. I had told the midwife on the former occasion, that she had lost the child by not sending sooner, and desired she would never call me again in such a manner. This reproof had the desired effect, for she sent for me in this case, immediately on the waters coming off, and when she was certain that the breech presented. Finding the pelvis narrow, and that the breech did not advance with the assistance of the strong pains, I brought down the legs; but as the patient did not lie in an advantageous position, as described in case i. of this collection, I caused her to be turned to that posture, and delivered the body and head of the child, as in the two last cases, but with greater difficulty than any that I ever delivered in that manner, the child being alive. After the body and arms were brought down, by dint of many repeated efforts, I delivered the head, but in the mean time imagined it was impossible the child would be alive, as I found the neck was so over-stretched; and if it had not come along at the last effort, I was resolved to have used the crotchet. I stopped in the middle of these efforts, and attempted to extract with the short straight forceps; but the head was above the brim of the pelvis, and the curvature of the os sacrum prevented their taking a proper hold, so as to be of any service. This was the reason which prompted me to contrive a longer kind, the blades of which are curved to one side.—*Vide* the Anatomical Tables. Also collect. xxxv.

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C A S E XIV.

**I** WAS sent for in a great hurry to a labour, where the midwife had delivered the body and arms of the child, but after several trials, and the assistance of the pains, could not extract the head.

The forehead was detained above the pubes. Finding it was not possible to move it backward toward the sacrum, as she lay in a supine position across the bed, I pulled the body of the fœtus downward, and at the same time pressed the chin with the finger of the other hand to the breast; by pulling up and down with both hands, I at last brought the forehead out from below the pubes, and delivered the woman of a dead child, though not without great force.

I have had several cases, in which the nates presented, and the children, where small, have been delivered safely with the labour-pains, especially when the fore parts of the fœtus were to the back parts of the uterus, but commonly with more difficulty when in the above position.

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C A S E XV.

**M**R. — was called to a woman that had miscarried two years before, and since that had been subject to copious discharges, high coloured and fœtid. The membranes had been three days broken: he found the pains were but inconsiderable, and some waters still drained away during each; being also high coloured and fœtid. The os uteri was high up, thick, but little open, which prevented his knowing the position of the fœtus. As the

pains



pains were faint, the child advanced very little in many hours, yet she complained as much as if she had been in strong labour; and the os uteri was so extremely sensible, that she could not bear the gentlest touch without screaming. When the pains grew quicker and stronger, she placed herself on her knees, at which time he found the nates presented, and endeavoured to dilate the passage; but although the pains were vigorous and forcing, the part came no longer, neither could he apply his fingers to the groins, to help the body along. He then laid her in a supine position, and after introducing his hand into the uterus, with great ease brought down one leg, and finished the delivery. The child at first showed small signs of life, but afterwards recovered.

The mother, soon after delivery, was seized with a flooding, which, notwithstanding all he could do, carried her off in an hour.

Although it is difficult to judge of cases at a distance, yet I think, as the patient was not weak, and had strong pains, there was no occasion to force open the parts so soon to bring down the legs: the child is seldom in danger of being lost before the nates come down to the external parts; for it is safer for the patient to allow them to open the os uteri slowly, than to endanger its being torn with the hand.

#### C A S E S XVI. and XVII.

*In a letter from Mr. Ayer, dated Boston, Lincolnshire.*

**B**ETWEEN eleven and twelve at night, I was called to E. I. who was suddenly taken with labour-pains when asleep in bed, and they had broken the membranes. When I examined, the nates presented at the lower part of the pelvis, and the pains being strong, I did not attempt to push up the breech to bring down the legs; I only dilated the os externum, and soon after that, I was able to insinuate a finger into one of the groins; and in a little time a finger of my other hand into the other groin; by which means, and the assistance of the pains, I drew down the body of the ham, and extracted the legs. Having wrapped a cloth round the extracted parts, as the face of the child was toward the sacrum of the mother, the delivery was soon finished, only it stuck a little at the head, and the placenta adhered to the back part of the uterus, but came off without much trouble. The child did not at first seem alive, yet in a little time after began to cry. The patient, after being put to bed, was attacked with violent pains in her hips and body; on which I was again sent for. As the discharges were small, I sent an anodyne mixture, with Div. of theriac. androm. one half of which gave her immediate ease.—*Vide collect xliii. case iii.*

One of the gentlemen, and one of the midwives, that attended my lectures, were sent to one of the poor women, who was taken in labour in the eighth month of pregnancy. The os uteri was a little open, the membranes were forced down with the waters, and broken soon after they arrived; when finding that the child did not present in the natural way, they immediately sent for me. On examining, I found the os uteri thick and rigid; within it, on the left side, an elbow; and on the right, one of the nates. The patient had, some time before that, been much weakened by a quartan ague; her pulse was low and weak, her body greatly emaciated, and she could scarcely speak, or stand upon her legs. Being informed that she had taken little nourishment for several days, I sent for, and ordered her to take, a little toasted bread and warm wine frequently, to recruit

cruit her strength, and revive her spirits. Having sent for my principal midwife, and the rest of my pupils, I desired her to keep the patient quiet in bed, which indeed was only a little straw, laid in a cold garret. In about four hours the midwife sent for me; the woman was much recruited by the nourishment she had taken; for besides the bread and wine, she had also got some broth. Her pulse was much stronger, and she was able to walk about the room. After waiting some hours longer, and considering the woman had formerly easy labours, I thought it was pity to keep her longer in pain, as there seemed little hope of her being delivered without assistance; for, in examining again, I imagined what I took for the elbow was a heel, and the other one of the shoulders.

Having placed the patient on her knees and elbows, according to Davenport's method, not indeed of choice, but from necessity, for want of proper accommodation, and having her firmly supported by the female assistants, I gradually dilated the os externum, and, with some difficulty, introduced my hand into the vagina. Then I found with more certainty, that the foetus presented, according to my first opinion, viz. the hip at the right side, and the elbow, with the head above it, at the other side, within the os uteri. This I tried to stretch open; it was then about the width of a crown-piece, and could only receive the ends of the thumb and fingers contracted together, in a conical form; but the orifice felt so thick and rigid, that I could not, by several efforts, dilate so much as to be able to introduce my hand into the uterus. Although the patient bore it with great patience, yet it fatigued her so much, that I desisted, and was afraid of using greater force.

The assistants seemed much surprised when I ordered the woman to be again laid down on her side, and did not attempt any more to deliver the child; but they were all satisfied when I told them the danger of tearing the uterus, and the woman's dying in the operation from her great weakness; and that as there was no flooding, it was much safer to continue giving her nourishing food; for although the child presented wrong, yet when her strength was recruited, the pains would come on stronger, by which some of the parts would be forced down, and gradually dilate the os uteri. As her pains were weak, and at long intervals, I gave her a grain of opium to carry them off, and procure rest, desiring one of the midwives, left with the patient, to give her a little broth frequently, and to send for me and the pupils when the pains came on, and she found the os uteri more open. We left the patient at eleven at night, and were called early next morning. By the time three of the gentlemen reached the place, the breech came down on a sudden, and one of the pupils delivered the body and head with great ease, as the child was small. When the rest of the pupils arrived with me, we were informed that the woman had been visited with pains every now and then, and slept betwixt them, so as to be much refreshed; after which slumbers, the pains had suddenly returned with great vigour, forced down the nates, and opened the os uteri, which then felt soft and yielding. From the livid appearance of the child's body, and the stripping off the scarf-skin, it plainly appeared that it had been dead for many days. The woman recovered, though long in a weak condition.

#### C A S E XVIII.

A YOUNG woman going with her first child, of a weakly constitution, slender, and of a small size, had taken very little nourishment during the last months of her pregnancy, and had swallowed several purging medicines,

dicines, from a mistaken notion that she was dropfical. Both her husband and niece, who lived with her, died but a few weeks before she was delivered, which misfortunes funk her fpirits much, and increafed her weaknefs. The labour was very flow and lingering, on account of her great weaknefs. The midwife could not difcover any part of the child, till feveral hours after the membranes were broken; and then felt a foot, with a thigh laying acrofs, at the upper part of the pelvis. She immediately fignified the danger; upon which account I was fent for. On examining, I found it in the fame manner as the midwife had defcribed; her pulfe was weak and low, and she lay on her left fide, with her breech near the fide of the bed.

As she was fo feeble, I chofe firft to try if the body could be brought flowly along in that pofition. After ordering her a little warm wine, I introduced my right hand flowly into the vagina, during the time of a pain. I found the os externum fufficiently dilated, and brought down by degrees the leg and thigh; but then perceived the child was fo large that it would not be poffible to bring it along, unlefs I could bring down the other leg and thigh alfo. The thigh I had already brought down filled up the pelvis in fuch a manner, that I could not get my hand paff, without uſing too much violence; I then by degrees, juſt as a pain was going off, bent the leg to the thigh, and pushed it up into the uterus. As the woman could not be kept firm in this pofition, neither could I uſe fo ſteady and equal a force as to bring down the body and extract the head, as I could do while ſhe lay ſupine on her back, I had her placed in that pofition. She had not any flooding, except ſome little *ſhowers*, as they are termed by the midwives; theſe are only a few ſtreaks of blood, which frequently proceed from ſtretching the os internum. I again introduced my hand into the vagina, then paſſed it along at the fide of the pelvis, through the os internum, up into the uterus, and within the membranes. I kept my hand there a little to difcover the pofition of the child exactly, which lay with its left buttock, thigh, and leg, over the the brim of the pelvis, its belly toward the mother's, the right buttock to the woman's right fide, and the ſhoulders up to the fundus uteri, with its head turned downward to the left fide. I had introduced my left hand, which luckily answered beſt in this pofition. I then raiſed up the buttocks, and turned the belly more to the right fide, which brought my hand eaſier to the right thigh and leg of the child, which were extended up along the belly and breaſt. I laid hold of the leg, and folded it down along the thigh to the buttock; then brought it and the other leg into the vagina. The knees and thighs followed; but the child being large and the woman ſmall, although the pelvis was well ſhaped, according to her ſize, the breech and body of the child came along with great difficulty. I began to turn the belly of the child to the mother's back, before the breech was brought through the os externum; when the breech was turned to the os pubis of the mother, I gave it a quarter turn more, till its os ſacrum was to the right os iſchium, that this might turn the child's face, that lay to the right fide of the uterus, to the back part. I then turned its os ſacrum back to her os pubis, and brought along the body and the arms, and delivered the head as directed in the Treatiſe; but not without a good deal of force. The child was alive, which I ſcarcely expected; the mother was fo weak that ſhe could give little aſſiſtance to help along the placenta, but it was at laſt ſeparated ſlowly, and ſafely delivered; ſhe luckily had no large diſcharge from the uterus, but was in a very low faintiſh condition for ſeveral hours.



The only thing that could be done now, was to give her a little warm wine and water frequently, and sometimes a little weak candle, to nourish and strengthen her weak body. I ordered her belly to be kept moderately pressed with an assistant's hands, till a bandage could be safely applied. She was so weak, that I thought it was better to go on in giving her nothing more than a little nourishment, especially as it staid on her stomach. For some weeks before, she had thrown up most of her food, and could scarcely retain as much as to keep her alive; however, I ordered the following medicine; but only to be used if she should be taken with violent pains or restlessness.—℞ Sperm. ceti. theriac. androm. ā ʒi. Syr. croci. q. s. ut f. bolus sumend. cum haustu. sequent. et rep. quarta quaq. hora, vel ut opus fuerit ad duas vices.—℞ Aqu. cinnam. simp. ʒifs. Aq. alexiter. spirit. cum aceto syr. e meconio. ā ʒij.—The next day I found her much better; she had got some rest, and the discharges were moderate, although she had not taken the medicines.

## COLLECTION XXXIII.

*Of preternatural cases; the membranes not broken, or the waters not all discharged; also cases of floodings and convulsions, in which it was absolutely necessary to deliver.*

[Vide Part i. Book iii. Chap. iv. Sect. iii.]

### NUMB. I. CASE I.

I WAS called in the night to a young woman, and was told by the messenger, that she was in the utmost danger from a violent colic. After my arrival, while the mother was telling me about her daughter's illness, I observed the colic pains returned periodically, and seemed more like labour than the alledged complaint. She was then in bed, lying on her side, and her back toward the place where I was seated. On pretence of examining her stomach, I felt the lower part of the abdomen of a round globular figure; and below the integuments, the uterus firm and tense, above the pubes, and betwixt that and the umbilicus; then I examined the vagina in time of that pain, and found the membranes forced down with the waters to the lower part thereof. When the pain abated, I felt the shoulder and arm of the fœtus within the relaxed membranes. Without saying any thing to the patient, I desired to speak with her mother and aunt in another room, and as this was an ante-nuptial affair, I told them the case, and desired they might hold their tongues at present; for if they acted otherwise, it might endanger the patient's life. Having desired the patient to move her breech near the side of the bed, and slipped a bed-sheet, folded, below her, to sponge up the moisture, I gradually introduced the fingers of my right hand contracted in a conical form, through the os externum, which was largely dilated by the membranes, during the interval of the pains. As one of these returned, I pushed my hand into the vagina, and against the tense membranes; to break through them, so as to get within them to the body of the fœtus; but they being rigid, my hand slipped through the os uteri, and up into the womb, on the outside of the membranes; then grasping them

them with my fingers, they burst asunder. As I had now introduced my hand within the membranes, I found the child floating in a large quantity of waters, which were kept up so as that not one drop could pass, my arm plugging up the passage. I now found the head was detained by the navel-string surrounding the neck; this I disengaged, and by a little push at the head it swam up to the fundus uteri; then the nates coming down, I took hold of the legs, and brought them without the external parts; the child being small, was easily delivered with the placenta, but died soon after. According to the patient's reckoning, she was only entered into the seventh month of her pregnancy. Had I known this circumstance at first, there would have been no occasion to do any thing but perforate the membranes; for as the passages were so largely open, and the child so small, it would have been soon delivered in any position with the labour pains; but as my hand was up in the uterus, it was then better to deliver as above.

The case was of great use to me afterwards, as I discovered by it, that the waters are prevented from coming down by the arm plugging up the passage, if the membranes are not broken before the hand is introduced into the uterus; and this is a favourable circumstance when the child is large, and in a wrong position; for when the membranes are broken, and the waters pour off all at once, before the hand can be got up, the uterus contracts so close to the body of the child, that it is then more difficult to effect the delivery.

#### C A S E II.

A WOMAN bespoke me to attend her, because her two former labours had been difficult, and both children had been lost. When I was called to her in labour, I found, during a pain, the os uteri largely open, and within the membranes the feet and nates of the fœtus; but before mentioning this, I enquired of the patient how her former labours were, and if in the natural way: the nurse answered that they were; but on my saying that the child came now in a wrong position, she acknowledged that both the former children came by the feet, and were delivered by different midwives, who were obliged to use a great deal of force, and each a long time before the heads could be delivered; but this circumstance had been kept a secret from the patient, to prevent any gentleman being called. Examining after this information, and not finding any signs of a distorted pelvis, I imagined that the loss of the children might have proceeded from the heads of both obstructing the circulation of the navel-strings. Being in hope of succeeding better, I had the patient laid in bed, in an advantageous position, for the more speedy assistance, if the delivery should prove tedious, viz. supine, across the bed, and her legs supported by two of my pupils, who were allowed to be present, as a recompence for my trouble. The pains being strong, the waters had by this time forced down the membranes through the os externum; into which I easily introduced my hand, broke the membranes, and brought down the legs and body of the child; but as it stuck at the shoulders, I was obliged to bring down one of the arms, and after that another: I then felt that the difficulty of delivering the head was from the child being large, and the patient and pelvis small. As I still felt a pulsation in the funis, I had all along, and at the different efforts, used great caution to prevent over-straining the neck; but after many unsuccessful attempts to deliver in time of the pains, and the pulsation of the funis growing languid, as well as the woman's efforts, I was obliged

to increase the force, as in cases of the last collection. I had the long curved forceps ready, but as I had delivered the children with more force, and alive, I tried one effort more, by which the head was delivered. At that instant I was sorry to find the neck over-strained; and reflected, that this might have been prevented with the above instrument. The child, when delivered, seemed alive; and by using the common method to assist respiration, it gasped three or four times, and expired. Besides my being sorry that I did not try the forceps before this last effort to deliver, I also reflected, that as there was a large quantity of waters surrounding the child, that the membranes were not broken, the parts largely open, the woman and pains strong, and that her children had been lost from the difficulty of delivering the head; these circumstances considered, it would have been better practice, as directed in collect. xvi. No. vi. cases iv. vii. and viii. to have introduced my hand into the uterus, broke the membranes, and brought down the head to present; by which means it would have been squeezed down in the lengthened form through the small pelvis, and the child would have had a better chance of coming with more life into the world.—*Vide* collect. xxxiv. No. i. case vii.

### C A S E III.

*The membranes broken, the arm in the vagina, and the shoulder filling up the os uteri, in such a manner as kept up the greatest part of the waters.*

**B**EING called to a woman in labour, the midwife told me that some time before I arrived, the membranes had broke. On examining, I found the hand and fore-arm forced down without the os externum; and being informed that a large quantity of waters had been discharged from the uterus, I expected it would require much force to turn, and deliver, by bringing down the legs of the child.

Having prepared every thing necessary to prevent hurry and confusion in time of the operation, and having also put the patient in a supine position, as directed in collect. xxv. No. i. case i. I took hold of the child's hand, which was the right, with my left-hand, and introduced my right in a flattish form, up betwixt the sacrum and the child's arm, where I found the shoulder closely engaged in the os uteri, which prevented all the waters from coming off; for pushing up the arm and shoulder, they, with my hand, slipped with ease into the uterus.

Finding that my arm filled up the vagina, so as to prevent the remaining waters from coming down, I with my hand examined the position of the fœtus; and found the head low down at the left side of the uterus, the nates to the right, at the fundus, with the legs folded up at that side. As there was a large quantity of waters still remaining, I raised the head of the fundus uteri, and brought down the legs with much greater ease than I at first expected, and the child not being large, was safely delivered.

### C A S E IV.

**B**EING called to a patient in labour of her first child, I examined in time of a pain, and found the os uteri was open about the breadth of a shilling, the membranes and waters were forced down, and gradually dilating the parts; but not being certain as to the presentation of the child, I desired a midwife, whom I left in waiting, to send for me when she found



found the labour farther advanced. The woman being impatient, I was again called in about two hours, when I found no great alteration, only the os uteri was felt a little softer, and not so thick: as the pains abated, I likewise felt some part of the child, but feared it was not the vertex, as it had not the large round hardness of that part, being rather softer, and more unequal. I mentioned nothing of this, but encouraged the patient, and allowed the labour to go on slowly, by which means the os uteri was gradually dilated; and at last I plainly perceived that the face presented. In order to prevent reflections, if the child should have been lost in the delivery, I privately, without the patient's knowledge, told her friends the wrong presentation; and on pretence that a supine position would assist the delivery, I had her conveniently laid in that attitude, so that I could assist with advantage, in case the waters should be discharged on a sudden. By this time the membranes had fully stretched the os uteri, and began to dilate the vagina; but being afraid they would break before they could sufficiently open the os externum, I gradually assisted every pain with two fingers in the vagina, to make room to introduce my hand, either to be ready, in case the membranes should break, to bring the head of the fœtus into the natural position, if the pelvis was narrow and the head large; or if not, to turn and deliver by the legs. When the parts were sufficiently dilated so as to admit my hand, I easily introduced it into the vagina, on which the membranes broke, and some of the waters came off; then I pushed up the head, insinuated my hand into the uterus, and my arm filling up the vagina and os externum, prevented any more from coming down. The fore parts of the child were to the right side of the uterus; the pelvis was not narrow, nor was the child uncommonly large; and there being still a large quantity of water, I with great ease and safety brought the legs, and delivered the child.

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C A S E V.

ONE of the poor women where the pupils attended, fell in labour in the eighth month of pregnancy, about ten days after she had been severely beaten; she had been in a lingering way for two days. As the midwives and gentlemen could not feel any part of the child present, they suspected it would be a preternatural case, and sent for me. On examining, I found the os uteri largely open, and in time of a strong pain, the waters forcing down the membranes into the vagina; but when the pain abated, and the tense membranes relaxed, no part of the fœtus could be felt. I then observed, as this was the woman's first child, it was still proper to have patience, and allow the membranes to stretch the vagina and external parts. Having ordered the patient to be laid in a convenient posture, as in the former case, to be ready to deliver in case the fœtus should be in a wrong position, I waited until I found the membranes were forced through the os externum, and had sufficiently dilated the same; but finding them still rigid, the woman weak from want of nourishment, and considering the length of the labour before we were called, I thought it was proper to begin, and, if possible, to prevent the loss of all the waters, in case the child was in a wrong position. As a pain abated, and the membranes were relaxed, I introduced my hand into the vagina; but feeling no part of the child, I concluded it lay across the uterus, with the back, side, or belly downward. In this opinion, I forced my hand up into the uterus, on the outside of the membranes; which giving way, I insinuated my

hand within them, and was surpris'd to find the whole body of the fœtus close up at the fundus uteri, and a large quantity of waters below, which were kept from coming off by my arm plugging up the vagina; I also felt the head lower than any other part of the child; the cause of this position I did not know till after delivery. Having searched for the feet, and brought them, with the legs, without the os externum, I wrapped a cloth round them, and turned the fore parts of the child backward; but after several attempts I could not deliver the body. Examining the legs, and finding by the cuticula being livid, and stripping off, that the child was certainly dead, and that the obstruction proceeded from the inflation of the abdomen, I resolv'd to open it with the scissars, or the more certain method of the crochét; but on making another trial, and with a good deal of force, the expanded belly came out all on a sudden; and as the child was small, the shoulders and head were easily deliver'd.

If the membranes had broken, and the waters come off in time of the labour, the head of the child would have presented to the birth. I have had a few cases of the same kind, where I could not feel any part of the child before the membranes were broken, and I could not account for this circumstance before I attended this woman; but I have since observ'd, where no part could be felt when the waters were come down with the membranes, and the passage was largely opened, and the head presented after the waters were in part or wholly discharged, that the child had been dead some time; and from the inflation of the abdomen, was specifically lighter than the waters, especially when there is a large quantity kept at the upper part of the uterus; but if there is a small quantity, the head will be felt before they are discharged.

## N U M B. II. C A S E I.

*Children deliver'd in the four last months of pregnancy, from violent floodings*

**I** WAS sent for to a woman, who was attacked with an hæmorrhage from the uterus in the sixth month of pregnancy, occasioned by a fall from a horse; she complain'd much of pain in her left side, on which she fell, and said her belly seem'd as over-strained from the violence of the shock. She was brought home, bled, and put to bed before I arriv'd at the place. The parts affected were also fomented and embrocated, with a mixture of oil, spirits, and vinegar. The discharge at first was but small; she had no pains that indicat'd a miscarriage coming on; and her pulse was regular. I order'd barley-water acidulated with sp. vitrioli for her drink; directing her to be kept quiet, that she might get as much natural rest and sleep as possible. Next morning, finding that she complain'd more of the bruised parts, that the discharge still continued, and that the fear of this, and the fright from the fall, had prevented sleep, she was again bled; upon which the above complaints were abated; and she being costive, was also much relieved by an emollient clyster. In the evening several small clots of blood were discharged, with slight strainings, and the hæmorrhage return'd with greater violence than before. The bleeding at the arm was repeated, and a pægoric draught given her, in which were 25 drops of Sydenham's liq. laud. by which means the discharge again abated, and she slept pretty well all night. The complaints from the fall were now much better; but she being much dejected on account of the danger of miscarrying, I endeavour'd to soothe and assuage her fears. I desired

desired her to keep chiefly in bed ; to continue drinking barley-water acidulated ; to live mostly on weak broths and panada ; and to abstain from fermented liquids, and every thing that was not of easy digestion. Nevertheless, for several days, a bloody serum was continually draining ; and every now and then some coagula came off with strainings ; which brought on a fresh hæmorrhage, that soon abated. About eight days after she had received the fall, I was sent for in great haste at six in the morning ; and was informed, that the discharge of a large coagulum of blood was followed by a violent flooding, which still continued. I found her pulse low, her countenance pale, and she was so faint that she could scarcely speak. I had all along told her friends the great danger to which she would be exposed, if the flooding should return and increase before labour came on. Although she had already lost a large quantity of blood, yet it was by intervals ; and there had been time between the discharge to recruit her strength by the above-mentioned light nourishing diet. I now found the discharge rather increased ; that there was little probability of restraining it, so that she might proceed in her pregnancy ; and I was afraid, if I delayed attempting the delivery longer, she might soon be in imminent danger of her life.

At this period of my practice, I did not know, that applying styptics in the vagina, and filling up with dossils of lint, would sometimes restrain the flooding, and assist to bring on labour ; neither did I know, that the breaking of the membranes, to allow the discharge of the waters, was of use to restrain the floodings, by allowing the uterus to contract close to the contained embryo or fœtus.—*Vide collect. xxv. No. ii. case ii. and vii. also collect. xxv. No. i. case iii.*

Having signified to the friends the danger that the patient was in, I desired the husband to call another gentleman of the profession ; who came accordingly. After being informed of every circumstance about the patient, he was of the same opinion, and thought it absolutely necessary to deliver her as soon as possible. Having encouraged the woman, I had her laid in a firm position, as described in *collect. xxv. No. i. case i. and iv.* expecting, as it was her first child, it would require a good deal of force, and cost the patient much pain, before the parts would be sufficiently dilated, so as to admit my hand into the uterus. Having laid several doubles of a sheet below the patient, and being seated properly, I began gradually to stretch the os externum. Having made room for my fingers, which were contracted together in a conical form, I continued moving them slowly in a semicircular manner and by intervals, till at last I introduced my hand through it into the vagina. During these and the following efforts, the patient was told, and imagined, it was her labour coming on ; by which deception she bore the pain with great fortitude. I now found the os uteri only so much open as to receive my fore-finger ; by turning which from side to side, it yielded so as to receive the middle, and by repeated efforts, was at last so much dilated, as to enable me to introduce all the fingers of that hand ; yet after several trials, I could not make a larger opening ; and my fingers being much cramped, I was obliged to withdraw that hand, which was the right, and try to dilate with the fingers of the other ; which were also ineffectual, so that I thought proper to desist. The patient having undergone much fatigue, we ordered her ten drops of liquid laudanum in a cup of burnt red-wine, and applied cloths dipped in vinegar to the external parts, and over the abdomen. Happily for the woman,

we



we found that the flooding was again diminished; and agreed, that supporting her as before with nourishing fluids, to supply the loss of blood, was the only method by which we could hope to carry her on, and keep her alive until the parts should grow more soft and yielding, or the labour become more vigorous. About nine or ten at night, the flooding returned, but was soon restrained by giving a draught with 15 drops of liq. laud. She continued in this way for three days, the flooding returning four or five times, and abating on repeating the draught. At the end of this period, she was again attacked with another violent discharge, which did not abate as formerly. Finding the os uteri softer, and to appearance more yielding, I made a second trial; and at last with some difficulty dilated so effectually, as to introduce my hand into the uterus; then breaking the membranes, I found a larger quantity of waters than could have been expected, considering the smallness of the child. To prevent the weak patient's fainting, from the sudden emptying of the uterus, I desired one of the assistants to press on her belly with both hands; and after I got hold of the feet of the child, I slowly brought down my arm which had kept up the waters, that they might be discharged by degrees, and at the same time desired the assistant to press a little more. The child being small was easily delivered; it came into the world alive, but died in a few hours after its birth.

As the placenta did not follow by pulling gently at the funis, I again introduced my hand, and found it at the back part of the uterus, the inferior part of it adhering firmly, and feeling like a scirrhus substance; I therefore did not venture to separate it, for fear of tearing the inner substance of the uterus; but only brought down that part that was already separated; for, some time before this, I had a patient who I imagined was lost by using too great force to separate the placenta in the seventh month. Although the violent discharge was much abated after delivery, yet the patient seemed to be in great danger from repeated faintings, her pale countenance and low pulse; for these reasons I prescribed five drops of liq. laudanum in a little burnt claret, applied a cloth dipped in vinegar to the abdomen, with a long towel pinned round her body. We were obliged to keep her lying on her back, with her head and shoulders in a low position, for at least two hours, before we durst venture to place her right in bed; giving her every now and then some broth out of a tea-pot, and likewise some more of the red-wine; we also repeated the same doses of liq. laudanum a second and third time; in consequence of which, she fell into little dozing slumbers, and at last recovered from the most imminent danger. She continued in a weak condition for many days: that part of the placenta which was left behind communicated a disagreeable and mortified smell to the discharges, and did not separate and come off before the fifth or sixth day after delivery.

I have been the more particular in describing every circumstance of this case, to show your practitioners the difficulty and uncertainty of managing flooding cases, especially in the last four months of pregnancy; for they frequently stagger the judgment of the most experienced practitioners.

#### C A S E S II.

**B**EING called by a midwife to one of her women, who had been attacked with a flooding for several days, and was then only in the seventh month of uterine gestation, the midwife told me, that the patient had

had been bled, and every thing done to restrain the discharge; but now it was increased to that degree, that it had run through the bed; that she had undergone frequent faintings, every one of which it was feared would be her last; the midwife also informed me, that she had something like labour-pains every now and then. The woman's pulse was low, her countenance pale, and indeed like one ready to expire; on examining, I found the os uteri open near the breadth of half-a-crown, and the breech and feet of the fœtus presenting. I gave the patient five drops of laud. liq. in a little red-wine, and repeated the same every five minutes for three times; not daring to give more at a time, on account of her weak condition, as the flooding still continued. When she seemed to have a little straining, I tried to bring on a pain, by stretching the os uteri with one of my fingers; this forced the membranes and waters down so strongly, that I broke them; but finding, after waiting some time, that this had not the desired effect to restrain the flooding so much as I expected, I repeated the laudanum. As the woman continued to have frequent faintings and cold sweats, I told the friends that there was little hope of life, even if she were delivered, and gave my opinion that perhaps she would expire in the attempt; but as they begged that I would try, and as it seemed the only method, and the last resource to save her from death, I stretched the parts gradually, and delivered the fœtus; but as it was her first child, it required a good deal of force to dilate the os uteri; and on introducing my hand through it, I felt it give way, and tear on the left side. The child was alive, and lived till next day; the placenta followed the delivery. The patient fell into a kind of dozing, and recovered contrary to expectation, considering the low condition she was in at the delivery. The laceration of the os uteri gave me a deal of concern. I had been formerly employed in a case, where the woman was not so weak; and by using great force, in order to save both mother and child, the os uteri was tore; the woman died soon after from loss of blood, as I then imagined, proceeding from the torn vessels of the uterus. *Vide* case ix. of this collection.

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### C A S E III.

**A** MIDWIFE sent for me to a woman who was excessively weak and low from a violent flooding. She had formerly been delivered by a gentleman of several children. The midwife at first informed me that she had been but lately called; that the patient had lost a great deal of blood, and was in the utmost danger from frequent faintings. The woman's pulse was so low that I could with difficulty feel its motion; a cold dampness overspread the face and extremities, and she could scarcely speak. On examining, I found the mouth of the womb largely open, the placenta lying over it, and the vagina filled with coagulated blood. The husband begged I would do all in my power to save his wife. I told him the case was dangerous, and so much time already lost, that I was much afraid she would expire in the operation. All present were convinced of the danger; I was moreover informed, that the patient had a small degree of flooding for several days; but that evening it had increased with greater violence, and was attended with some labour-pains; which last had left her for more than two hours. There being no broth ready, I ordered an egg to be beat up with warm water, seasoned with a little salt, to which was added some red-wine; a little of this was given immediately. In the mean time I prepared every thing for the delivery, and desired the midwife to move the patient nearer

nearer the side of the bed, with her back toward it. During this alteration, she again fainted; and indeed every one present imagined she would not recover from the swoon. When recovered a little, she, in a low tone, begged earnestly to be delivered. Her strength being somewhat recruited, I introduced my hand into the vagina, and tried to reach the membranes, in order to break them; but the placenta was over the mouth of the womb. I being afraid of tearing the after-burden, slipped my hand flattened through the os uteri, and betwixt that and the placenta, until I reached the membranes; which I broke through by grasping them with my fingers, then taking hold of the legs of the fœtus, which were at the fundus uteri, I brought them down slowly into the vagina. The midwife was seated on the opposite side of the bed, on purpose to press with both her hands on the abdomen, to prevent, as much as possible, the patient's fainting away, from the too sudden evacuation of the uterus. As there was a large quantity of water still detained. I desired that the pressure might be increased when I withdrew my hand; and although the head was at first downward, it easily turned up to the fundus when I brought down the legs. Finding the patient bore the operation without fainting; I removed the wet cloths above, and applied dry ones to the external parts; I ordered some more of the egg-caudle and wine to be given; and then, with great ease, delivered the child, which was dead. The secundines followed, being forced out by the weak effort of the woman, along with a large quantity of coagulated blood. When I introduced my right-hand into the uterus, to deliver the child, I passed the edge of the placenta, at the patient's left groin, and found it adhering to the back part and right side of the under part of the uterus; this an advantage, in consequence of which I got sooner to the membranes. That part of the placenta, which was detached, and over the os uteri, was of a dark livid colour; the other that adhered to the uterus, was fresh and well coloured. After delivery the flooding abated, and to appearance the patient seemed a little recruited, and lay pretty quiet for some time; but in an hour after she began to have a difficulty of respiration, which gradually increased, with rattling in the throat; at last she fell into faintings and convulsions, which soon closed the dismal scene, by putting a period to her life.

The midwife, who was an old practitioner, and in good repute, told me, that the gentleman who formerly attended the patient in all her labours, had been called some days before, and ordered what he thought proper in such circumstances; but the complaint increasing, and he being otherwise engaged, the midwife was sent for at his desire, when she found the patient had a small degree of flooding, which increased and diminished by intervals; but as she found nothing like labour beginning, she desired the patient might still continue to take what was prescribed by her physician. She was again called next evening, when she found something like labour-pains, the mouth of the womb a little open, and some soft substance like the placenta presenting. On this the doctor being again sent for, declared what presented was only a large coagulum of blood; and went away, after ordering some other medicines. As the flooding continued to gain ground, the husband went for the doctor, but did not find him at home. The hæmorrhage increasing, and the woman appearing to be in imminent danger, he went again and found the doctor in bed; who said he could not go with him, because he expected to be called every minute to another patient, to whom



whom he had been previously engaged. In a word, he could not be prevailed upon by all the intreaties the gentleman could make; so that immediately after the husband's return I received a call.—In a little time after this occasion, he was, for neglecting a patient in the same circumstances, exposed, sued, and cast in a considerable sum of money.

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C A S E IV.

A MIDWIFE sent for me to a woman, and told me her patient was attacked in the beginning of labour with a discharge of blood, which was not violent at first; but as she found it increase, she desired my assistance. Before my arrival the membranes had given way, and one of the child's arms come down into the birth. I understood the flooding had diminished, and that now there was very little blood on the cloths. On examining all the cloths, I found there had been a good deal of blood lost; nevertheless, although the woman's pulse was low, yet she did not seem so weak as I expected. Indeed, before I examined the case, I ordered her to take some wine with her candle, to strengthen and recruit her spirits. On trial, I found the arm lying double in the vagina, and the shoulder pressed in at the upper part. Being afraid, if I delayed the delivery, it would be more difficult to turn the child, I caused the patient, as she already lay in a supine position, to be brought down to the foot of the bed; the weather being cold, and that part nearest the fire-place. I ordered two assistants to support her legs; and as it was not her first child, I easily introduced my hand into the vagina. There being a small quantity of waters retained in the uterus, from the shoulders plugging up the os uteri, I with great ease pushed up the arm and shoulder into the uterus, raised them up to the fundus, brought down the legs, and delivered the child, which was but small, the placenta following without any assistance. While I was employed in dividing the funis of the child, which was alive, one of the assistants told me the woman was fainting away. I immediately gave her the child, and pressed on the abdomen of the patient with both my hands, having forgot that precaution in time of the delivery; but instead of recovering from the fainting, she was immediately thrown into convulsions, and died instantly. Besides the pressure on the abdomen, every method of stimulating was tried to prevent the fatal catastrophe, as volatile salts, spirits, and burnt feathers held to the nose, to quicken respiration, also frictions of the temples, arms, and legs. I reflected afterwards, that the fainting did not proceed from any new evacuation of blood after the delivery, as there was very little on the cloths, but from the neglect of the pressure. As the flooding had stopped after the membranes broke, it perhaps had been safer to delay the delivery till the patient recovered more strength, or at least until the pains returned, which were gone off on the discharge of the waters; for the shoulder of the fœtus would have kept up the remaining waters until those efforts returned.

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C A S E V.

A WOMAN of a very weak habit of body, having been under great affliction for the loss of her husband, was suddenly taken with a violent hæmorrhage, upon which a gentleman, who had been bespoke to lay her, was sent for about four in the morning; but he being otherwise en-

gaged, I was called about seven, and desired, by an acquaintance that came for me, to make all possible haste to prevent the woman being lost for want of proper assistance. In this emergency a midwife had been also called, who told me that the patient had some slight pains, and had not lost much blood; in which assertion she was contradicted by the attendants, as well as by the woman herself; they desired me to examine the cloths, where indeed I found a large quantity; and was informed that the midwife made slight of the affair, to prevent another being called. As I found the patient's pulse very low, and her countenance pale, I told the friends the danger, and desired them to send again to the other gentleman, as he might now be disengaged; but this was objected to, as it would take up too much time, especially as he lived at a considerable distance; they therefore begged I would not delay assisting the woman, who was in so deplorable a condition. On examining, as the patient lay on her side, I found the os uteri fully dilated, the membranes and part of the placenta presenting. I introduced my hand in a conical form into the vagina, intending to break the membranes, that the waters, after being discharged, might allow the uterus to contract to the body of the child, and restrain the flooding; but the membranes were rigid; and in making an effort to lacerate them, my hand slipped easily through the os internum into the uterus, on the outside of the membranes. After having broke through them, I delivered the child and secundines, as in the former case, but in a slower manner. I ordered one of the assistants to press the abdomen with both hands in time of the operation. The child was alive, the hæmorrhage abated, and the patient, who bore the delivery with more courage than I expected, seemed at first to be in a good way; but having lost more blood than her weak condition could well bear, in a little time her pulse became low and creeping, and her extremities grew cold. I then ordered warm bottles of water, wrapped in flannel, to be applied to her feet, legs, hands, and arms, and supplied her frequently with chicken broth, which was then ready; I also prescribed a cordial mixture with confect. cardiac. a spoonful of which was to be given from time to time. In consequence of these precautions, she enjoyed short, yet interrupted slumbers, and recovered, contrary to my expectation; but was several weeks so low that she could not sit up. In about six weeks after, she was carried to the country, and recovered her strength by drinking asses-milk.

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#### C A S E VI.

I WAS called to a patient attacked with violent flooding in time of labour. My attendance had been bespoke. I found the os uteri rigid, and open about the breadth of half-a-crown. This trial being made in time of a pain, I waited till it went off; and the membranes being relaxed, I felt the head of the fœtus within them, resting above the ossa pubis; but between that and the membranes I felt something like the funis umbilicalis lying backward toward the sacrum, in two or three doubles. As she had not had a stool for two days, one was procured by administering an emollient clyster. Having waited some time, and finding the pains were but weak and seldom, I sent for Mrs. Maddocks, a midwife whom I kept on purpose to attend my patients in lingering cases, and desired her to put the woman to bed, in hope she would obtain some sleep; but enjoined her to send for me when the pains grew stronger, and before the membranes broke.

About

About six next morning I was called in a great hurry, and not a little surprised when I came into the room to find the patient pale and fainting, the friends surrounding the bed all in tears, begging my assistance to save the woman's life. The midwife I left told me the patient had slept a good deal till about five, and had only waked now and then with the pains; that there had been some shows, or a very small appearance of blood on the cloths; but that all on a sudden she was attacked with a flooding in time of making water, and that it still continued to pour from her in a large quantity. On examining the cloth that had been applied to the parts when the fainting began, I found very little blood; the hæmorrhage having been restrained in time of the deliquium. The patient recovering, and taking a little wine and water, I felt the os uteri largely open, the membranes pushed farther down, and part of the edge or side of the placenta at the left side of the os uteri; I also with more certainty distinguished the funis on the inside of the membranes, and the head in the same position resting above the pubes. This case being uncommon, I was uncertain at first how to proceed; but at last considering with myself, if I broke the membranes to evacuate the contained waters, so as to allow the uterus to contract and restrain the flooding, the fœtus would be lost by the pressure of the head against the funis in time of delivery, I resolved, in order to prevent this misfortune, to turn the child, and bring it along in the preternatural way, which would give a better chance to restrain the one and save the other, if the operation could be performed in a slow cautious manner. As there was no broth ready, I ordered the whites of two eggs to be beaten up with a pint of warm water, seasoned with salt; this to be given the patient from time to time with a little wine, to replenish the emptied vessels. Having assigned to the midwife and the other assistants their proper stations, and prepared every thing necessary, I examined in time of a pain, which forced out some coagula of blood from the vagina, with a fresh discharge. As the patient lay on her left side, I kneeled down on a cushion behind, introduced my right-hand into the vagina, and as the placenta was at the left side, I turned my hand so as to slide it gently through the os uteri, and up betwixt the membranes and right side of the uterus. Having grasped and broke the membranes, I insinuated my hand within them, raised the head to the fundus, and turning the fore parts of the child to the back part of the uterus, brought down the legs into the vagina, allowing the waters to come off by degrees. Meanwhile I desired one of the assistants to press with the palms of her hands on the patient's belly, and increasing the pressure as the uterus emptied. The patient endured all this with great fortitude.

Having cleared away the wet cloths, and applied dry ones to the parts, I observed that the flooding was diminished, and rested more than half an hour. In the mean time I directed her to take several times some of the above caudle. Finding her strength and spirits recruited, I delivered the child, which was small, with great ease, and the secundines followed. The pressure was continued on the abdomen of the patient until a long towel was applied round her middle, and secured so as to do the office of a firm bandage. The child was very weak at first, but recovered. The mother continued in a low condition for many days, being supported with broths and cordials, but was able to get out of bed in three weeks.



## C A S E VII.

THE midwife, when called, was informed by the patient that her pains were but slight and seldom; but she was much alarmed at some blood that came away every time, as there had been no appearance of any such complaint in her former labours. When the midwife examined, she found the mouth of the womb a little open; but could not distinguish any part of the child; and the woman being of a weak and delicate constitution, she told the friends the danger she would soon be in if the discharge increased. On this information Dr. Gordon being sent for, ordered an anodyne mixture; and as he was obliged to go out of town, desired them to call me if the flooding did not go off, or strong labour come on. Soon after this the patient was taken with violent and frequent retchings, which very much increased the flooding. On this I was immediately sent for; but being called in a great hurry from one labour to a second, the messenger could not find me, and went for Dr. Sands. In the interim I came home; and being informed of the message, reached the house before he could arrive. The labour-pains by this time were gone off; the patient's lips and countenance were pale, the pulse had sunk, and she was attacked with frequent singultus. On examination I found the os uteri largely dilated, the membranes and waters presenting, and something like the fingers and funis umbilicalis of the fœtus within them. By this time the flooding was a little abated, on which it was proposed to send and prevent the other gentleman's coming, as he lived at some distance; but I told them by no means, as the woman was still in the utmost danger, and it was very proper to have his advice and assistance, both on account of the patient, as well as to prevent reflections, and for the satisfaction of all concerned. By this time my brother accoucheur arrived. I had given her every now and then a little broth and wine to recruit her sinking spirits; and when he examined, he told me that he found those parts mentioned above, and likewise the head of the child forward and resting above the ossa pubis. This I had not perceived; for as she lay on her left side, had only examined with a finger of my right-hand, which I could not turn above the pubes; but on trial with my left, I easily found the head resting above these bones. After consulting together, and considering every circumstance of the case, he at first proposed, as the flooding was diminished, to give the patient a paregoric draught, and wait with patience for the return of the labour; but soon after this, and before the medicine arrived, she was attacked with a violent fit of retching, which forced down a large coagulum of blood, attended with a return of the flooding, which ran over the bed. This sudden change altered our former resolution; and we now concluded, that the only method to save the patient's life was a speedy delivery. Indeed I was of that opinion at first, on account of her weakness, as well as in respect to the safety of the child, as the funis had fallen down before the head. The side of the bed being wet, and at a distance from the fire, I had the patient turned to her back, and moved down to the feet. While two assistants supported her legs, I kneeled down, and, with greater ease than I expected, introduced my hand into the uterus, and delivered the child and secundines, much in the same manner as in the former case; having taken almost the same precautions to prevent the patient fainting away and sinking under the operation. There was no appearance of life in the child: yet no part of it was livid, neither the lips nor private parts; a circumstance which plainly shewed that it had not been long dead. As the flooding

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ing was now stopped, we ordered the patient to take about a tea-cup full of broth every quarter of an hour or oftener, to support her, and recruit the loss of so much blood; but not too much at a time, lest her weak stomach should be over-charged, and bring on again the retchings, to which she was very subject (as the nurse informed us) even in time of health. We likewise directed her, if she should not get refreshing rest, or if the flooding should return, to swallow the pægoric draught already prescribed; in which were twenty drops of tinct. thebaic. By these precautions, and proper attendance, she stood for eighteen or twenty days to be in a good way of recovery, considering her weak and delicate constitution. *Vide collect. xli. No. v. case vii.*

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### C A S E VIII.

ONE of my patients sent her coachman to me, desiring that I would go to his wife. He informed me that she had been in labour above 24 hours; that she had formerly easy labours; but now she was reduced so low by a sudden loss of blood, that he was afraid she would sink before I could reach the house. On my arrival, the midwife told me, that as soon as labour began, the patient was taken with a small degree of flooding, which had gradually increased as the mouth of the womb opened; but that she had all along found an uncommon substance presenting, and had some hours ago desired the friends to send for a doctor, a proposal to which the woman herself would by no persuasions consent to. She was to all appearance in a dying condition, nearly as described in case iii. and No. ii. of this collection. On examining, I found the os uteri largely open, and the placenta over it; on which I signified to the husband and friends the great danger, declaring I was apprehensive she would expire in time of delivery, and that it was a great pity she would not allow assistance to be called for before it was too late. Her sister begged that I would deliver the child, as it was now the only chance to save her life; and if she should die, no person could be blamed. I used all the precautions as in case vii. but in passing up my hand by the placenta into the uterus, I could not break through the membranes. I was therefore obliged to withdraw it, and push my fingers through the placenta; then I delivered the child in the preternatural way, on which the flooding stopped; but she was so weak that she expired in a few minutes. Yet, contrary to my expectation, especially as the placenta presented, and was tore through the middle, the child was alive.

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### C A S E IX.

A WOMAN aged about 30, who had been delivered of several children before, was taken with a violent discharge of blood from the uterus; she was immediately bled, opiates and restraining medicines were prescribed. They restrained the hæmorrhage a little; but it returned with more violence, and to such a degree, that when called again, I expected she would expire every moment. The midwife informed me, that something like labour was begun; on which I examined, and found the os uteri open about the circumference of a crown piece, and very thin. The relations of the patient all begged of me for God's sake to deliver her as soon as possible, to give her a chance for life, and not to let her belly be the grave of the child. I complied with their request, and delivered her much in the same manner as described in cases vi. and vii. of this collection and No. but unluckily,

luckily, when stretching the os uteri, which felt thin and rigid like a piece of parchment, the woman shrunk from the side of the bed, which obliged me to dilate with more force than I intended, to get my hand into the uterus; at which instant I felt the mouth of the womb give way, and tear at the side, so as to allow my hand to pass without farther difficulty. The flooding diminished after delivery, on giving her 15 drops of tinct. thebaic. but returned in two hours, and ceased again on repeating the same medicine. She slept pretty well all night, was next morning much recruited by the refreshing rest and nourishing diet; but soon after was attacked with a violent hæmorrhage from the vagina, by which she was in great danger of expiring immediately. This was checked by introducing into the vagina a sponge dipped in a solution of alum. To me it seemed probable, that this flooding might proceed from some of the large vessels being tore that enter at the side of the uterus. She was long weak; but by the assistance of the cort. peruv. and a nourishing diet, recovered. The child was alive, and at the full time. *Vide collect. xxxv. case x. and collect. xl. case viii.*

*As I principally write for the instruction of young practitioners, I have inserted the following cases of floodings, sent me from gentlemen who formerly attended my courses of midwifery, as I think they may be also useful for the same purposes.*

#### C A S E X. by Mr. Gr——.

I WAS sent by Dr. Smellie to a patient, who complained of a violent cough, which had continued eight or ten days, and was the occasion of bringing on a flooding, for which she had been bled a few days before. She was of a thin habit of body, and fallow complexion, had a slow and weak pulse, which was now and then raised by fits of coughing. That night I gave her ten grains of the pilule saponac. and next forenoon she was considerably better both as to the cough and the flooding. In the afternoon she was ordered to take two spoonfuls of a cordial and pectoral julep frequently; the pills were also repeated, by which means she rested very well that night; but next day the cough and flooding returned, for which I took about ten ounces of blood from her arm. When I first examined, the os uteri was not in the least dilated; but this day she having had some slight labour-pains, it was open about the largeness of a sixpence. As she was costive, I ordered a clyster, which had its proper effect; and after that the following mixture, to strengthen and encourage the pains:—  
 R Pulv. boracis ʒij. Tinct. castor. croci. aa ʒj. Spir. lavend. Sal vol. oleos, aa gt. xl. Aq. cinnamomi ten. ʒj. Aq. menthæ ʒvj. Syr. croci. ʒjss. Cap. cochlear. ij. secunda quaq. hora.—After this her pains came on stronger and more frequent; but all on a sudden she was attacked with a violent fit of coughing, which again brought on the flooding, and forcing down a large quantity of coagulated blood. In this emergency, I was sent for in a hurry, and found the os uteri largely dilated, the placenta presenting, and several lobes of the same separated from the membranous part, and lying amongst the coagula that had been discharged. At this time she had no pains; and the midwife told me that the waters had been come off about an hour before I arrived; this was about one in the morning. Finding her faintish, with scarce any pulse, and her extremities almost cold, with a clammy sweat upon her head and hands, I told the friends the danger she was in, and the necessity of delivering the patient directly. Having put her



her in a supine position, and ordered every thing necessary to be in readiness, as the placenta lay in my way, I first brought that away, then turned and delivered the child by the feet with great ease till I came to the head, which, as it was large, stuck in the passage, until I introduced one of my fingers into the mouth, and depressed the lower jaw, which assisted the head to come along with great ease. On examining the child's body, I perceived it had been dead many days, from the livid appearance of the same, but more especially from the scarf-skin being stripped off in several places. As the secundines did not follow the delivery, I again introduced my hand, and brought them down, with the remaining part of the placenta; and ordered the patient some ol. amygd. d. and syr. ex althæa, for her cough; also some ther. Venet. with pulv. Gafcon. to warm her, and promote perspiration. When I saw her next morning she was a little feverish; the lochia were in a small quantity, and her cough was much abated, and she had got tolerable good rest. To assuage the fever, and assist the uterine discharges, I ordered her to take repeated doses of the saline draught, sweetened with syr. diacod. which relieved her much; and by proper nourishment she recovered better than I expected.

C A S E S XI. XII. and XIII.

*By Mr. Mudge, of Plymouth.*

I WAS called to a woman in the forenoon, about half an hour after eleven o'clock, and was informed, that as she was spinning in the morning at six, she found something gush from her with so much force, as made her suspect it to be the waters; but on looking on the floor she found it was blood. She had continued flooding in that violent manner till I was sent for; she was come nearly to her full time, but had not felt any pain through the whole. The patient was lying on the bed, her whole body was pale, and had a livid appearance, covered with a cold clammy sweat; and almost without any pulse. I was showed a chamber-pot three parts full of pure blood; and it was now pouring down in so great a quantity, that I imagined the only chance to save her life was a speedy delivery. After acquainting the friends of the imminent danger, I examined, and found the parts greatly relaxed, and the head of the fetus presenting to the birth, which I passed with my hand to seek for the feet; but the first thing I met with was the placenta, quite detached, and lying loose in the uterus. This puzzled me at first, and made my coming at the membranes somewhat difficult and confused; however, I got to them, tore them open, and taking hold of the feet, brought them down to the passage, and soon finished the delivery. On introducing my hand to bring off the secundines, I found the uterus not contracted, but lying like a loose unelastic bag in the abdomen. The flooding stopped directly, and the woman seemed much revived. I gave her 20 drops of liq. laud. in a cup-full of mulled port wine; but not having a sufficient quantity of blood left in her vessels to carry on circulation and vital secretions, she died in about half an hour after delivery.

The second case was of another woman, nearly in the same circumstance as the former, with only this difference, that she had not lost quite so much blood. When she sent for me, I found her flooding very fast. She was come to her full time, but had no pains, nor any appearance of labour. I gave her an opiate, and desired her to keep quiet in bed. This

was about eleven o'clock in the forenoon; and when I called again, about half an hour after one, the hæmorrhage was not gone off, but rather increased. The former case was too fresh in my memory to delay my assistance in this; I accordingly told the patient the great danger she was in, and that it was absolutely necessary to deliver her as soon as possible; with some little reluctance she consented. Having introduced my hand into the uterus, I was very cautious of keeping up the waters. On insinuating my hand through the membranes, I raised the head, turned the child, brought down the feet, and perfected the delivery in a very few minutes; the placenta was in great part detached. The mother did very well, and the child was a strong healthy boy.

In another case, a woman who had bespoke me to attend her in labour, was seized with a violent flooding when seven months gone; on which account I took ten ounces of blood from her arm, ordered her an opiate, and desired that she should keep quiet in bed. The hæmorrhage abated, but returned next day; when it was again stopped by repeating the opiate, and ordering her a course of saline draughts. For 12 or 14 days, the patient continued to have frequent returns of the floodings, which were as often restrained by the above methods; at which period, being sent for again in a hurry, I found the discharge violent, her pulse exceeding weak, her countenance pale, her eyes sunk in her head, and to all appearance she was in a dying condition. I immediately gave her a large opiate in a cordial draught, that it might have the full effect by the time the delivery was finished. As soon as every thing necessary was prepared, and the patient laid in a right position, I introduced my hand, and found the right arm of the child in the passage, which was easily and gradually pushed up into the uterus. This I found strongly contracted, the waters having, as they informed me, gone off three days before. With my hand I gradually dilated, until I reached the feet of the fundus; and bringing them down with some difficulty, I finished the delivery in the usual manner, after giving the proper turns, that the fore parts of the body should be toward the sacrum. I also had some difficulty in delivering the placenta. The woman recovered; but the child died in a quarter of an hour after it was born.

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C A S E XIV. *By Mr. M.*

A WOMAN being seized with a flooding in the morning, sent for me in the forenoon; she was come to her full time, and a week before had some appearance of the same kind. She had no pains; her pulse was high and quick. I immediately took blood from her arm, ordered an opiate and some saline draughts. The discharge soon abated, and she remained without any appearance, till seven in the evening, when I was called in a great hurry by a servant, who said her mistress was dying; and was met by another in the way, repeating the same exclamation. On my arrival, I indeed imagined the patient was just dying; her pulse was so low, that it could scarcely be felt to move; her face and arms were covered with a cold sweat; her eyes had lost their lustre, and the blood was pouring from the parts. As nothing but instant delivery could give her the least chance, I informed the husband of the circumstance. He consenting, I then seated myself, and having introduced my hand into the vagina, found the os uteri much to one side, and so little dilated, that I could scarce introduce my fore-finger; but by stretching the same gradually, and slipping

slipping in one finger after another, I at last dilated it so as to receive my whole hand. The first thing I met with was the placenta fixed to the mouth and interior part of the womb, but separated on the back part; I broke through it, tore open the membranes, and taking hold of the feet of the child; brought them down to the passage, and with great ease finished the delivery; but in the hurry to save the woman's life, one of the child's arms was broke, which I afterwards reduced; and it proved a stout hearty boy. The patient recovered, contrary to the expectation of all present; and both she and the child, I am persuaded, must have inevitably perished, if this method had not been taken, or even if it had been longer delayed. I again repeated the opiate in a cup of mulled wine, notwithstanding which, in about five or six minutes after, a fainting fit had nearly carried her off. To prevent any farther discharge, which, though trifling, she now could not bear, I ordered cloths dipped and wet with vinegar, to be applied to her back, and over the belly. The woman was of a thin habit, and tender constitution.

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*C A S E XV. By Mr. M. A. of E—:*

A WOMAN aged 40; and seven months gone with the seventeenth child, was threatened with a flooding, for which she was bled, and confined to her bed for four weeks; after which the hæmorrhage returned, and continued, though not violent, for two days; on the third, at three in the morning, the blood came away in a torrent, and overflowed the whole bed. When I arrived, which was about five, the patient was faintish, with scarce any pulse to be felt; on which I intimated the great danger, and that it was absolutely necessary to deliver the child as soon as possible. When every thing was prepared for that purpose, I examined, and found the os uteri not sufficiently dilated; however, I got hold of a foot, and pulled it down, without searching for the other, and delivered the child with great ease, having neither been obliged to bring down the remaining leg or arms. The child was large and healthy, according to the woman's time of reckoning; the hæmorrhage, though not violent, continued two days longer, and the mother recovered.

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*C A S E XVI. By Dr. D. of T—:*

HE was called to a woman in the eighth month of her sixth child, who had been subject to floodings for two months before. The nurse showed him the bed-pan, in which was about two pounds of coagulated blood; and on examining the patient, the vagina was full of the same; the os uteri was lax, and open about the breadth of half-a-crown; but he was at a loss at first to know what presented. As the patient was excessively weak, faint, and low, he was afraid she would expire under his hands. He told her friends, that the only way to save her life was a speedy delivery; however, he tried to raise her spirits with gentle cordials; a clyster was also administered, with a view to assist the pains, which were but trifling; and when it operated, the coagula were forced from the vagina. As the flooding still continued, he had the patient placed in a supine position, and having introduced his hand into the vagina, found the placenta presenting; after which, with great ease, he dilated the os uteri, slipped up his hand on the outside of the membranes, and with some difficulty tore them asunder. Although he found the head of the child presenting, he



durst not, as the woman was lying like a corpse, wait for a natural delivery, but immediately turned the foetus, brought down the feet, and with little difficulty delivered the body and head, which were very floppy and flabby, the child appearing to have been dead several days. He with some difficulty separated the placenta from its adhesions, and was agreeably surprised that there was no sensible flooding; all present were delighted to find the patient so sensibly recovered and cheerful after delivery. He ordered a gentle opiate to allay the after-pains, which had the desired effect; the lochia were sufficient, and in short every thing was to his wish; but a fever intervened, with irregular horrors and rigours, attended with singultus and delirium; and in spite of all endeavours, she died on the fourth day after delivery.

The doctor being desirous of my opinion as to his conduct in this case, and two others, which are inserted in collect. xxviii. case v. and xxxiv. No. ii. I sent him the following answer:—

S I R,

YOUR conduct and method of treating the three cases of midwifery, which I received with your letter some posts ago, gave me great satisfaction. The first, where the arm of the child presented, has no doubt convinced you, that it is only losing time, as well as fatiguing the patient and yourself, to try to alter a preternatural position into a natural, when the waters are discharged, and the uterus strongly contracted, and embracing the body of the foetus. As to the case of flooding, it was indeed enough to damp your spirits, and even to have had the same effect on an old experienced practitioner. No doubt the woman retrieving her spirits and strength after delivery, gave you great hopes of her recovery; but the issue shows the uncertainty of human endeavours, and that we should never be too secure. I commonly, in such cases, to prevent and carry off a fever from inanition, order repeated doses of the bark. Your management of the third case was also very proper; and, as you observe, the forceps should never be used but when absolutely necessary. Indeed, when the head is so low in the pelvis, that you are certain of succeeding, and the pains gone, or too weak to force out the same, that instrument supplies the place of hands, when the fingers slip and cannot take a proper hold; but even then, the head ought to be brought along in a slow manner, and as the pains would have acted, if they had been sufficiently strong.—Dear Sir, go on and prosper, and continue to write me when any more difficult cases happen in your practice, which will much oblige, your's, &c.

#### NUMB. III. CASES I. and II.

*Women attacked with convulsions; the children delivered preternaturally.*

A MIDWIFE sent for me in the morning to a patient whom she had attended all the foregoing night; and who, without any accident, or previous warning, was all on a sudden thrown into fits. At first they only returned every two or three hours, but afterwards more frequently. The woman had all along been stupid and senseless. The midwife told me that the patient was in the beginning of the ninth month of her pregnancy; that she formerly delivered her, when she had an easy time, and no such complaint; that the mouth of the womb was a little open, but she had not found any thing like labour-pains. Soon after I came, she fell into a fit, during which I examined, and found the os uteri a little open, and that the convulsion seemed to act with the same kind of effort as a labour-pain. As her pulse was full, I ordered ten ounces of blood to be taken from her

arm, and a blister to be applied to her back. No medicine could be given internally, as she could not swallow any kind of nourishment since the first attack. In about four hours I was again called, on account of the convulsions recurring more frequent and violent, and found the os uteri softer, and much more open. Although, as before observed, there was no appearance of labour, yet the violence of the agitations and strainings in time of the fits, might have proved sufficient to deliver the child; but I was afraid it was dangerous to allow the convulsions to go on longer, and was persuaded that a speedy delivery was the only probable method to save the patient, as well as the fœtus. After informing the friends of the danger, and the necessity of relieving the woman by delivery, and having placed the assistants to keep her in a firm position, I with great ease introduced my hand through the os uteri, broke the membranes, turned the child, and delivered it by the feet.

The child was alive, and the mother had not another fit after the delivery; but she remained stupid and senseless for three days, then became gradually more and more sensible, and would not believe for some time that she had been delivered.

Some time after, I was called to a poor woman near the Seven-Dials, and was told by the midwife, that the patient was come to her full time, that labour was just begun, and at every pain she was thrown into a violent convulsion fit. The pains were not frequent, she was sensible between the fits, the os uteri was a little open, and the head of the child presented. As her pulse was quick, I ordered twelve ounces of blood to be taken from her arm, and a large blister to be applied on her back, betwixt the shoulders; a clyster was also administered, which gave her a plentiful passage. This was in the morning, and I desired the midwife to send for me if the fits did not abate, or return with greater violence. In about two hours after I left the house, they again sent for me, but being then engaged with one of my own patients, I sent one of my oldest pupils, and desired him, if the convulsions did not abate, to deliver the woman immediately. At first he found the patient in a dozing or comatose way, but soon after she was attacked with a violent convulsion fit; he told her friends that it was absolutely necessary to deliver her immediately, and that I recommended this method to save her life, which was in imminent danger; the midwife was of the same opinion, but the woman's husband and sister would not consent or allow him to do any thing until I could come to her assistance. On my arrival in the evening, I found the patient was in a comatose state, and now quite insensible; the fits more frequent, with tremors and subult, tend. On this I told the friends the uncertainty of saving her; and was sorry to find that they had prevented the gentleman from assisting before it was too late. They now begged that I would do all I could to save the woman, and allowed me to send for some more of my pupils; the gentleman who was with her in my absence, told me, that the convulsions had dilated the os uteri a little every time; however, it being her first child, it required some force and time before I could stretch it so as to pass my hand into the uterus; this being effected, and having broke through the membranes, I brought down the legs, and delivered the child; but have forgot whether it was alive or dead. The case was not so fortunate as the former; for although the placenta came easily along, and the uterine discharge was sufficient and moderate, yet the convulsions were not restrained; but becoming more frequent and violent, carried her off in two hours after delivery.

## CASES III. and IV.

**I** WAS sent for by a midwife, who told me that her patient's labour had gone on exceedingly well until the waters came off; but soon after that happened, she was attacked with strong convulsions, which went off, and returned every time when a labour-pain began to come on. The os uteri was sufficiently dilated. The head of the fœtus presented at the brim of the pelvis. The woman's pulse was very quick, and her face uncommonly florid; on which account 12 ounces of blood were taken from her arm. But finding this avail nothing, and the convulsions growing more violent and frequent, and the head not advancing in the least, I thought it most expedient, in this uncommon case, to deliver by turning the fœtus; which I easily performed as the waters were not all discharged from the uterus. The child was alive, and the woman had not another fit after delivery.

Another time, a young woman come to her full time was taken with violent convulsions when she fell in labour; for which she was immediately bled, and a clyster was given, which had the desired effect. Nervous medicines and opiates were also administered; the last to allay the pains that seemed to bring on the fits; for every time a labour-pain came on, she was thrown into convulsions. The os uteri was open about the breadth of a crown-piece, and a hard unequal substance being felt, at first made it uncertain what part of the child presented. She was ordered to drink plentifully of weak green tea, and barley-water with sal. nitri, sweetened with syrup of althæa. In about three hours after this prescription, the os uteri was much more dilated; and on examining, I found that the forehead and eyes of the child presented; the violence of the fits had abated after the bleeding and the opiate; but were now grown stronger, and more frequent. In these dangerous circumstances, dangerous both from the convulsions and bad presentation of the child's head, I thought it was wrong to delay the delivery any longer. All present being made sensible of her situation, I had the patient kept firm in bed in a supine position, and gradually dilated the parts; which required time, and a good deal of force also. I brought down the feet of the child, and delivered, though not without greater fatigue than I expected. The child was alive, and, as in the former case, the woman had not any more fits after the delivery. She soon fell into a sound sleep, and recovered. When I first introduced my hand into the uterus, and found it strongly contracted to the body of the child, I knew it would require great force to turn it; supposing that the wrong presentation prevented the head from coming along, I made the trial to turn down the vertex; but that failing, I delivered in the preternatural way.

## COLLECTION XXXIV.

*Of preternatural deliveries, in which the membranes were broken, the waters evacuated, and the uterus was closely contracted to the body of the fœtus.*

[Vide Part i. Book iii. Ch. iv. Sect. iv. and Anatomical Tables, xxxi. xxxii. xxxiii.]

## NUMB. I. CASE I.

**B**EING called to a woman, I was told by the midwife, that a great quantity of waters had come off suddenly; and as the child did not present fair for the birth, she had desired my assistance. On examining, I found the hands and feet presenting, and come down into the vagina, together,



gether with the funis umbilicalis, in the arteries of which there was a strong pulsation. This last circumstance I did not mention, because this being the woman's first child, I did not know whether it could be saved in the delivery. I had learned, by experience, that if the child is mentioned to be alive, and afterward perishes in the birth, the mother grieves, and imagines it is lost by the unskilfulness of the practitioner. As the patient was then in bed, and lying on her left side, I tried to deliver her in that position; but being prevented by her flying from me, I was obliged to turn her on her back, and across the bed, with her breech to the side, and her legs supported by two assistants. Having confined her to this advantageous position, I gradually introduced my hand into the vagina, and in a flattened form slipped it up backward, between the sacrum and those parts of the fœtus that presented, into the uterus; there I found the breech lying at the left, and the head at the right side; but not so low as the breech. As the legs were lying double in the vagina, by hooking two of my fingers on them, I brought them and the thighs down; and the child being small, the body and head were easily delivered, as described in collect. xxxii. case i. and ii. by which speedy delivery the child was saved, and the mother relieved from danger. The placenta separated, and was soon forced down into the vagina by the after-pains.

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### C A S E II.

I WAS called to a case, in which the child presented nearly in the same manner as the former; only the funis was not fallen down into the vagina; but after the body was delivered, the head of the child stuck at the brim of the pelvis, on which I made several trials to bring it down into the vagina; but finding the child was alive by the pulsation of the arteries in the funis, I was afraid of over-straining the neck, if I repeated these trials and increased the force. The patient being in a supine position, I introduced a blade of the long forceps, that were curved to one side, up along each side of the pelvis, while an assistant held up the body of the child to give more room for their application; and having fixed them on the head, and joined the blades of the instrument together, I introduced two fingers of my left-hand, and fixed them on each side of the child's nose, while my right pulled the head with the instrument, and delivered it safely. These two successful cases gave me great hope, that the above method would be of great service to save the lives of many children, who are generally lost by over-straining the neck in delivering the head; but a third, in which I failed, showed, that we ought never to trust too much, or be over sanguine, with respect to any particular method of practice; but vary the same as we find it necessary. However, although I have not had an opportunity of making any more trials of that kind, yet as I succeeded twice, the practice is adviseable; especially when we are certain that the child is alive from the pulsation of the funis, or motion of the body, or would prevent over-straining the neck, or avoid using the crotchet. *Vide* table xxxv. of the anatomical figures.—*Vide* case v. of this No. and the viith.

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### C A S E III.

I WAS called to a woman in labour; the legs, arms, and funis, were forced down into the vagina, the last hanging without the os externum; no pulsation in the vessels; the waters had come off long before, and the midwife

midwife had tried to deliver the child, but failing in the attempt, had again folded up the legs and arms into the vagina along with the funis, with a design to keep them warm till I arrived. As the patient was in bed, and lying on her left side, I sat down behind her, and found in time of a pain the funis pushed down, without the os externum, and there was not any sensible motion in the vessels. This not being the woman's first child, and the midwife having also sufficiently dilated the passages, I with great ease introduced my left-hand along the back-part of the vagina into the uterus, and found the head of the fœtus above the pubes, a little to the right side: the breech was to the left side, and higher than the head. I brought the legs down from the vagina, and wrapping them in a cloth, tried to pull down the thighs and body; but the head being so low, prevented their descent. Finding the fœtus large, I turned the woman into a supine position, as in the former case.

I then took hold of the legs with my right-hand, and introduced my left up the right side of the pelvis to the head of the child, and while I pushed it up to the fundus uteri, pulled down the legs farther, by which method the breech was brought lower, and the head prevented from returning to obstruct the delivery of the body. When the thighs were brought without the os externum, I turned the fore parts of the child backward; but afterward it required a deal of force, when the body was brought out, to deliver the head; and indeed if the child had been alive, it would have run a great risk of being lost from the over-straining of the neck.

#### C A S E IV.

**I** WAS called to a woman who had been long in labour; on examining the part that presented, it felt very much like the shoulder-blade; but on the midwife's informing me that some of the child's purgings had come down on the cloths, and examining a second time, I found it was one of the hip-bones. Being informed this was not the woman's first child, and finding her much exhausted with the length of her labour, and learning, on enquiry, that her former labours had been quick and easy, I thought it was pity to keep the patient longer in that distressed condition. Having ordered every thing necessary for the delivery to be in readiness when wanted, I had the patient firmly secured in a supine position, and on introducing my hand, found the left hip presenting, the shoulder and head near the fundus uteri, to the right side, and the legs and arms backward. This examination being made, in a slow and gentle manner, I first tried to bring down both legs, but finding them entangled with the funis, and the child alive, I could only bring down the left foot, which was the lowest; this being very slippery, and the uterus strongly contracted, my hand was so cramped that I was obliged to grasp the foot between two of my fingers, to bring it without the os externum. I afterward brought down that leg and thigh, and tried to bring the other also, but was prevented by a strong pain that forced down the left hip into the pelvis; upon which I introduced two fingers of my right-hand, and hooked them in the back part of the child's right groin. Another pain coming on, by pulling at the left leg with my left-hand, and at the above hold with my right, I delivered the child safely, as described in the breech cases. The child lay some time, but recovered.

## C A S E V.

**T**HE head, in this case, was to the right side of the uterus; the breech on the left, near the fundus, with the arms and legs backward, as in the former case; but as the uterus was not so strongly contracted, some of the waters still remained. I grasped the body with my left-hand, and raising the head and shoulder to the fundus uteri, by which the breech was brought to the lower part, the legs with great ease were grasped and brought through the os externum.

I had the patient moved in the supine position. Having brought down the body and one arm of the child which lay before the face, I introduced two fingers of my left-hand into the mouth, as in collect. xxxii. and the fingers of my other over the shoulders; then trying to deliver, I could not move the head down after several gentle efforts in this manner. I let go my hold of the under-jaw, and tried Daventer's method, by pressing down the shoulders to bring out the occiput from below the os pubis; but this failing also, and finding there was still a pulsation in the funis, I resolved to try the forceps. I now desired the midwife to hold up the body of the child so as to give me more room for introducing that instrument; but it being too short, and the head above the brim of the pelvis, I could not fix them properly so as to render them of any use to assist the delivery.—*Vide col. xxxv. case ii.*—This method failing, and the pulsation of the funis beginning to grow languid, I again took hold of the child as at first, but finding the under-jaw like to be over-strained, I fixed a finger on each side the nose, and standing up in time of a strong pain, I exerted a deal of force; as the forehead of the child was backward above the projection of the upper part of the sacrum, I had already turned it to the right side, to give more room for the head to come down. Failing in this last attempt, I rested a little, till another pain should return; but they being weak and seldom, and finding the pulsation at a stand, I again exerted greater force, by which I at last got the head delivered. Every method was tried to recover the child as formerly described in parts i. and ii. also in collect. xxxii. of this part, but all to no purpose.—*Vide cases. iii. and vii. No. i. of this collection.*

## C A S E VI.

**A** GENTLEMAN called on me, when I was engaged with a patient, and desired me to come as soon as possible to his wife's assistance, giving me to understand, that as she was stepping into bed, the waters had come off without any previous warning. I desired him to send for the midwife who attended in her former labours. She accordingly was sent for, and arrived just in time to shift the patient and put her to bed, by the time I reached the house. She told me, that on examining, she found a foot lying in the vagina; but I perceived it was an arm lying double, and I brought the hand through the os externum, to convince the midwife that it was not the part she imagined. Although there had been no labour-pains that the patient thought were worth noticing, yet the parts had been so dilated before the membranes broke, that I easily introduced my hand into the uterus, and found the child's head above the ossa pubis, the fore-part backward, and a little to the left side. After disentangling the funis umbilicalis, I brought down both legs, but finding I could not bring the feet farther than the lower part of the vagina, I slipped a noose over them, as described in my Treatise of Midwifery; then taking hold of the fillet with



my right-hand, I introduced the other to the head, and pushed it up, while I pulled down the legs with the noose: by these means the head was raised to the fundus, the arm that was down returned into the uterus, and the child was safely delivered.

I delivered this gentlewoman once before, when the case was much the same, and of several children afterward: her belly was somewhat pendulous; and it was remarkable, that if the membranes broke while she lay in bed, the head of the fœtus presented; but when in a sitting or standing position, it slipped over the ossa pubis, and the arm came down into the vagina. One lucky circumstance attended these, for after the membranes broke, the shoulder filled up the os uteri so exactly, that there remained a sufficient quantity of waters, by which the delivery was easily performed.

*C A S E VII.—Vide Table xxxv.*

**I** WAS called by a midwife to a woman where the arm of the child was come down, and lying double in the vagina. As the waters were not all come off, but kept up by the shoulder in the os uteri, I first tried to raise the arm, and bring down the head so as to present in the natural way. I made this trial on finding the pelvis narrow, the pains strong, and the woman not weakened with the length of the labour; but failing in this attempt, I raised the head and shoulder to the fundus uteri, and after bringing down the legs and body, tried again and again to deliver the head in the safest manner. Finding there was still a strong pulsation of the arteries in the funis umbilicalis, and being afraid of losing the child by overstraining the neck, although I had failed with the short straight forceps, as in case v. yet I resolved to try a longer pair that were curved to one side, to suit the curvature of the os sacrum. They were contrived to take a better hold of the head when presented, and high up in the pelvis; but I did not recommend their use in such cases, for fear of doing more harm than good, by bruising the parts of the woman when too great force was used.—*Vide table xii. and xvii.*

The patient being in a supine position in bed, and two assistants supporting her legs, I found the forehead of the child was backward, but a little to the left side of the lowest vertebra of the loins, which jutted forward with the upper part of the sacrum, and gave more room for applying the forceps; wrapping a cloth round the body of the fœtus, I raised it toward the abdomen of the patient, which an assistant supported in that position. Being properly seated, I introduced my right-hand up the left side of the vagina, till my fingers reached the left side of the child's face; then with my left hand I insinuated a blade of the forceps up to that part. As I withdrew my right-hand to make more room, I slipped the blade farther, that the end of it might reach as high as the upper part of the child's head; then I moved it toward the left groin of the patient, that the blade might be over the left ear, which was at that part; the part of the blade that was bent to one side was to the pubes; and the convex part was backwards, to suit the concavity of the sacrum.—*Vide table xxxv.* My left-hand was next introduced up the right side, betwixt the sacrum and ischium, and along on the inside of my hand the other blade, in the same cautious manner, over the right ear; having locked them together, I introduced a finger of my left-hand into the child's mouth, to keep the face from turning upward; then pulling the handles of the instrument with my right, and increasing the force, I brought down the forehead past the narrow part of the pelvis;

pelvis; and turning it backward to the concavity of the sacrum, brought the head through the os externum, by pulling upward over the pubes, to prevent a laceration of the perinæum. There was a small impression made by the forceps on the scalp, which dispersed soon after; the child was strong and healthy; and although I used a good deal of force, the mother recovered without any uncommon complaints. Since my success in this case, I had another of the same kind, in which the child was saved by the same method.—*Vide* case iii. of this collection.—Another occurred in the course of the same year, in which that trial failed on account of the uncommon largeness of the head and smallness of the pelvis; there I was obliged to withdraw the forceps and extract the head with the crotchet.—*Vide* collect. xxxv.

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### C A S E VIII.

**I** WAS called to a woman whose membranes had broken the night before; the arm presented, pretty much swelled, and part of it without the os externum. Finding it was the left, I informed those who were present of the circumstances, in order to anticipate all censure, in case the child should not be delivered alive. The woman was laid across the bed in a supine posture, two assistants supporting her legs, and another on the opposite side to support her head and shoulders, and prevent any obstruction from hands and arms in time of the operation. With much difficulty I introduced my left-hand betwixt the swelled arm and the back part of the vagina, to the arm-pit; but it still required a good deal of force to raise the shoulder and head to the left side of the uterus, so as to allow room for my hand to pass on the right side, along the breast of the fœtus, to the fundus, where I found the knees; then hooking my finger in the hams, I brought down the legs into the vagina. As the fore-arm was still in the vagina, I could not fix the noose over the ankles, but was obliged again to introduce my hand; and by pushing up the shoulders and pulling down the thighs alternately, I at last, with much fatigue, raised the body higher. The arm being removed out of my way, I brought the legs without the os externum: the pelvis being large, the body and head were easily delivered. The swelling of the child's arm gradually subsided by the application of fomentations and cataplasms; but for several days it could not move that limb. One of the assistants told me, that finding the midwife pulling with a good deal of force, without being able to deliver the child, they were alarmed, and would not allow her to repeat these efforts till I came; they supposed therefore this was the cause of the arm being swelled so much when the child was delivered.

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### C A S E IX.

**I** WAS called to a woman who was excessively weak, could scarcely speak, and seemed to be in a dying condition. The midwife told me apart, that the patient had been in labour two days; that when the waters came off the child descended to the passage; that as she could not, after many trials, deliver the body, they had sent for a gentleman famous for the practice of midwifery; that after many efforts, and waiting several hours, he told the friends it was absolutely necessary to take off the arm to make more room for the delivery of the child; that she had greatly assisted in helping him to twist it off from the shoulder, and made a great merit of helping

helping the gentleman. She informed me also, that the patient had lost a great quantity of blood all the time of the operation; that all possible means had been used to separate the mother and child; but as her time was come, all was done that could be done by any mortal.

On examining the arm, and observing it was not much swelled, I desired she would never boast of assisting in such an operation; especially as it had done no service in forwarding the delivery. The gentleman, who lived about four miles from the place, had left the woman before I was called, and desired to be sent for when the pains returned, that he might then deliver her; promising, in the mean time, to send her a cordial julep. The friends after this information begged of me to deliver the woman if possible, and not let her go to the grave with the child in her belly. I told them that in all appearance she would very soon expire; and as the child was certainly dead, it was a pity to torture her any more; but as they were so importunate, and as there might be a chance of recovery, contrary to all expectation, and considering, that even though she should expire in time of delivery, it might be serviceable to the public to expose an ignorant pretender, who had acquired a great reputation, even in spite of several such blunders, I resolved to comply with their request.

Having ordered the woman to be put in the same position as described in the foregoing case, I expected it would require a great deal of force to turn the child; but was happy to find, on introducing my hand into the uterus, that the resistance was inconsiderable. I raised the shoulder to the fundus, brought down the legs, delivered the child and the placenta; which last being already detached, followed the body with a large coagulum of blood adhering to it; this last state of the uterus seemed to proceed from the great weakness of the patient. Although before delivery, the woman seemed to be insensible and comatose, yet after being roused by the unexpected news of the child being born, her drooping spirits revived, and she was able to express her thanks for my relieving her. All present were agreeably surprised to observe how easily the operation was performed, and sufficiently convinced of the ignorance of the other practitioner. I immediately ordered a little caudle to be given frequently; but although the flooding was now abated, she was so much weakened and exhausted with the length of the labour, and great loss of blood, that she died the same night, in about two hours after I left the place.

Some years before this incident, when I first settled in practice, a woman who had formerly been delivered of several children, was taken in labour; the midwife being intoxicated with liquor, I was sent for, and found the arm of the child come down into the vagina; the patient had been many hours in labour, and a flooding had begun; but was abated after the waters were discharged. I proposed to deliver by turning, and bringing the child by the feet; but that being a new method, and not known in the place, the midwife and assistants opposed it, and sent for an older practitioner, who undeservedly had also acquired some reputation in that branch; but instead of turning, he fatigued himself and the woman, by pushing up the arm to bring the head to present; and when that method failed, he tried to deliver by pulling at the arm.

Another gentleman was called, who lived at a much greater distance than the former; but the flooding had increased so much by the former violence, that the patient expired before his arrival; as he knew more of the practice, he regretted much that the method I had proposed was rejected.



## C A S E X.

**B**EING called to a patient, and examining, I found no part of the fœtus; but after placing her in a supine position, and introducing my hand into the vagina, I felt through the integument the haunch-bone and the ribs; insinuating my hand farther into the uterus, I rested a little, and slowly examined the position, so as to be able to take the safest and easiest method to come at the legs, and turn the body of the child. Finding the arms and legs lying double and forward, and the ossa pubis of the mother preventing my hand from taking hold of the feet, I turned her from that position to her left side, and on introducing my hand reached the feet, which were easily brought down, and the child was delivered. The woman had been two days in labour before I was called. She recovered, but the child was dead; as I forgot to examine the funis when the body was brought down, I could not determine whether it was dead before or lost in delivering the head, which required great force in the extraction.

## C A S E XI.

**I** WAS called to a woman who had been long in labour, and on examining found, that either the shoulder or haunch presented. As she lay on her left side, I tried to introduce my hand into the vagina in time of a labour-pain; but on her flying from me, and not keeping in that position, I was obliged to turn her to her back (*vide* collect. xxv. No. i. case i.) pretending that a supine position would assist the pains and the delivery. The friends present informing me of her unmanageable disposition, I had her firmly held by three strong women; then I introduced my hand, and felt the left haunch presenting, with the fore parts of the fœtus to the right anterior part of the uterus. Finding, as soon as I insinuated my hand into the womb, that the patient lay quiet, and did not make such violent efforts to move from me, and that in this position the pubes prevented my arm and hand from turning upward and forward, so as to take hold of the feet, I desired the assistants to turn her again to her left side. During this movement I durst not venture to withdraw my hand, lest she should renew her violent efforts against me. Her breech being a little over the side of the bed, a pillow betwixt her knees, which were raised up to her belly, and kept firm in this advantageous position, I stood behind her and began the operation; the pubes did not now prevent my hands going up to the fore part of the uterus; but the womb being strongly contracted, I could only bring down one of the legs into the vagina. By fixing a cloth round the ankle, I moved the child with its head up to the fundus; and being but small, it was easily and safely delivered.

## C A S E XII.

**I** ATTENDED a patient, to whom I had been bespoke; the membranes were broken, and a large quantity of waters discharged before my arrival. The arm lay double in the vagina, and the os uteri was sufficiently dilated. Having placed her in the side position across the bed, as described in collection xxv. No. i. case iii, I by degrees opened the os externum, which, as it was her first child, required some time, by dilating it a little every pain. At first imagining the fore parts of the child were to the back part of the uterus, I introduced my left-hand along the back part of the vagina, and in pushing up the arm and shoulder into the uterus to search

for the feet, I found my mistake as to the position, and that they were at the fundus and anterior part. Having withdrawn my left-hand I introduced the right, and raising again the parts that presented, I pushed up my hand at the fore part of the uterus, where I found the legs, arms, and funis entangled with one another, that I could not disengage them with my fingers so as to take hold of the feet. This difficulty, joined with the strong contraction of the uterus, which I did not expect would happen so soon, when the membranes were so lately ruptured, so cramped my hand that I was obliged to withdraw it once more. By these repeated efforts to force up the body, the placenta had been squeezed and loosened from its adhesion in the uterus, and a flooding was brought on. Observing this symptom, and considering that no time should be lost, I made a second trial in the same manner as soon as my hand recovered its former strength; but finding the same difficulty, I desisted from attempting any more to deliver in that position. Having turned her on the bed to her knees and elbows, with her breech high and shoulders low, and she being supported by assistants in this position, I again introduced my hand, and found the contraction and pressure so diminished, that I at last, though with a good deal of difficulty, got one of the feet betwixt my fingers, and brought it down to the vagina. By pushing up the body, and pulling down that limb alternately, the child was safely delivered; the placenta followed, and the flooding ceased.

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#### C A S E XIII.

A MIDWIFE sent for me to a woman in labour; she told me that the membranes broke soon after her arrival, and suspecting that neither the head nor breech presented, she had desired the husband to send for farther assistance. As the patient was lying on her side, I examined, and was of the midwife's opinion; but uncertain what part of the child's body was over the os uteri. She evaded my efforts in that position, therefore was turned to her back. Her breech was brought down to the foot of the bed, while two women supported her legs and kept her firm, to prevent her flying from me in time of operating. On introducing my hand, I found the middle of the back presented, and that the shoulders were to the right side of the uterus. These I first tried to raise to the fundus; but as I endeavoured to come at the breech to pull it down from the other side, the shoulders returned. Finding, after repeated trials, that this method did not succeed, I slipped up my hand along the back part to the fundus, where I found the feet; and as I pulled them down, the back turned upward; after which the child was soon and safely delivered.

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#### C A S E XIV.

I WAS called early one morning to a woman who had strong labour. The membranes had been broken the night before; although the midwife found the funis come down, and the child presenting wrong, yet she concealed these particulars, pretending that every thing was right, that it must take a long time to deliver the child; and she would not allow any assistance to be called for until the friends insisted upon having farther advice. When a pain came on I examined, and found the funis come down without the os externum, pretty much swelled, without any pulsation; then following it up into the vagina, I felt its adhesion at the abdomen, and told the friends, that the child presented in a wrong position, and was not alive.

Hearing

Hearing this declaration, they abused the midwife, and were about to expel her the house, if I had not interceded in her behalf, that she might assist the patient after delivery.—*Vide collect. xlix. No. 2.*—As the patient lay on her left side, and the parts had been largely dilated, either by the midwife or membranes, before they broke I with great ease introduced my hand, and felt the fore part of the thighs at the left side of the uterus; and tracing up higher, I got hold of the legs, which I could not then bring down because of the great contraction of the uterus. My hand being cramped, I brought it lower, and after resting a little, tried to push up the breast and bring down the thighs; but this did not alter the position of the child sufficiently; and the patient not being kept properly in the same position, I was obliged to turn her to her back (*vide collect. xxv. No. i. case i.*) Then introducing my hand along the back part of the uterus to the fundus, I took hold of the legs, and pulling them downward, the fore part of the thighs and belly turned upward, by which means the body was brought down; but the child being large, the head was delivered with some difficulty.

#### CASES XV. and XVI.

SOON after the membranes were broken, I was called to the first case, and found the breast of the child forced down into the upper part of the pelvis; expecting it would require strength to raise and pass it so as to come at the legs, I had the woman laid in the supine position.—*Vide collect. xxv. case i.*—Wrapping a cloth round the right-hand and fore-arm of the child, that were protruded without the external parts, I took hold of it with my left-hand, and introduced my right up the back part of the vagina; then unwrapping the cloth, and letting go my hold, I pushed up both the breast and the other arm into the uterus, where I found the head and neck above the pubes, the thighs and legs lying double at the left side; which last were easily brought down into the vagina.

After resting a little, I endeavoured to move round the body of the fœtus, by alternately pushing up the breast and pulling down the legs; but finding this only fatigued the woman as well as myself to no purpose, I introduced the noose, and fixed it slowly over both ankles, not without some difficulty, as the feet were still pretty high in the vagina. Having at last got it firmly fixed, I twisted it round my right-hand, and introduced my left, with which the breast was raised toward the fundus on the right side, while the legs were pulled down by the noose from the left, without the os externum; then taking hold of the ankles with my right-hand to prevent their being over-strained, I raised the body of the fœtus higher with my left, and by continuing to push up and pull down alternately, the head and shoulders were raised to the fundus uteri, the arms returned into the womb, the breech was brought down into the vagina; then both mother and child were safely delivered.

Another patient had been delivered by a midwife in the evening; and when I was called next morning, I found the right-arm and shoulder of a second child forced or pulled down without the os externum. The arm was not tumified; but as no pulsation could be felt at the wrist, I imagined the child was not alive. The neck, shoulder, and some of the ribs, as well as the arm, being all without the external parts, I was afraid that it would be impossible to force up these parts of the child into the uterus so as to turn the fœtus and bring down the legs; this method, however, I re-

solved



solved to try first; but if that did not succeed, then to deliver in the manner recommended by Celsus in such cases, viz. to divide the neck, and bring the divided parts separately. Having ordered the patient to be properly held in the supine position, I tried to force up the shoulder, and was happy to find that, the child being small, all the protruded parts returned easier than could be expected into the uterus; then I brought down the legs and delivered the child, which being alive, I was glad that I had not been obliged to fly to the last resource.

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### N U M B. II. C A S E I.

*The children lying with the superior parts to the os uteri; the feet and breech to the fundus; the waters evacuated, and the uterus contracted in form of a longish sheath.*

**I** WAS called to a woman in labour. The waters were discharged the day before my arrival. On examining, and finding the head of the child did not present, I had the patient laid in a supine position across her bed; introducing my right hand into the vagina, I felt the shoulder; and in raising it, observed that the fore parts of the fœtus were to the right side of the uterus, and the head turned up above the pubes. On this information, I was obliged to withdraw my right-hand, and introduce the left; while I tried to insinuate it betwixt the breast of the child and the right side of the uterus, I found this last so strongly contracted, that I was obliged to bring my hand lower, and push up the shoulder and head to the left side, to give more room for my hand and arm; these parts not moving round, I again forced my hand up along the breast; and by degrees reached the thighs and legs, which were folded double on the belly of the fœtus. As my hand began to be cramped, I rested a little, and the strength of my arm being somewhat recovered, I pushed up my hand farther and farther, to make more room for taking hold of the ankles: this I at last accomplished, and brought the feet down to the lower part of the uterus; but the great force which I exerted loosened the placenta, and brought on a flooding. Having withdrawn my left-hand, I introduced the right, with which, by pushing up the shoulder, and pulling down the legs alternately, I at last moved the body round, and the child was delivered, but not without changing hands three or four times, which were much squeezed and cramped by the strong contraction of the uterus; I was also, during the operation, obliged to alter my own position, from sitting, to kneeling and standing alternately, as I found it necessary. The placenta followed the delivery, and the flooding ceased; the child was alive, contrary to my expectation, considering the great force and squeezing on the breast and abdomen, before I could bring down the legs. The patient being a strong healthy woman, was not sunk by the flooding; which was of service in relaxing the uterus, and by emptying the vessels, helped to prevent an inflammation.

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### C A S E II.

*The right shoulder of the child presenting; the legs against the fore part and fundus uteri; delivery assisted by the noose.*

**I** WAS called to a person whom I had delivered twice before, whose pelvis was narrow and distorted. When bespoke to attend a third time, I was under no small anxiety, on account of the difficulty that attended

tended her labours; but more so, when called and examining, I found that the head of the child did not present. The membranes had not broken, but in time of a labour-pain were pushed down to the lower part of the vagina; and the mouth of the womb was largely dilated. After considering the case, I resolved to try in time before the membranes broke and the waters came off, either to bring the head to present, if large, or if the child was small, to bring down the feet, and deliver in the preternatural way; but while the bed was preparing, a strong pain came on, which broke the membranes, and a very large quantity of waters was discharged on a sudden, the patient being in a standing posture. The nurse having put her to bed, her breech was brought down to the feet of it, and she was laid on her left side; this position being most advantageous, on account of the projection of the distorted bones, which would have prevented my hand going up if she had been in the supine position. Having seated myself a little behind the patient, I introduced my right-hand into the vagina. The shoulder presenting, and the head to the right side of the uterus, I endeavoured to push up the first, and bring down the last, to present in the natural way; but finding the strong contraction of the uterus prevented my raising the shoulder sufficiently, and that the slippiness of the head evaded my fingers, so that I could not alter its position, I gave up all hope of succeeding in that manner; for when the membranes broke, the distorted bones prevented the shoulder coming down to fill up the passage, and keep up some of the waters. Finding the contraction of the uterus so strong, and the strainings of the patient so great, that I could not reach the feet, I caused her to be turned to her knees and elbows, to prevent farther strainings; while she was kept firm in this position by the assistants, I introduced my hand again, and finding the resistance less, I pushed it up gradually along the fore part of the uterus, where I found one of the legs, which I brought down; then pushing up the shoulder, and pulling the limb alternately, as in the former case, I extracted it without the os sacrum. By this time I was pretty much fatigued, and rested a little. The woman complaining of the uneasy position, I had her again turned to her side: having fixed a noose round the ankle, and twined the other end of it round my right hand, I introduced my left to the face and fore part of the neck and breast of the child, which were at the under part, and right side of the uterus; by pushing up these, and pulling at the same time the legs down with the noose, I brought the breech lower, and the head, with the breast, to the upper part of the womb.

Having withdrawn my left hand, and considered that there was still a greater difficulty to overcome in order to save the child's life, by bringing the head through the passage of these distorted bones, I moved the patient into the supine position, as described in collect. xxv. case i. This alteration afforded more liberty to operate with safety than could be procured in any other. Wrapping a cloth round the child's right leg, I began to pull; and by the assistance of the mother's efforts, brought down the hip to the lower parts of the pelvis; then introducing the fingers of my left-hand over the other hip into the groin, and pulling with both hands, I brought down the body to the arm-pits. Finding, by the pulsation of the funis, that the child was alive, I slipped my right-hand up along the breast, to feel the position of the head, which was still high, and above the distortion, with the chin to the right side; but not being able to bring the head or shoulders lower, I withdrew my hand. After having brought down both arms, I introduced my left-hand, and the head being a little lower, I

hooked

hooked two fingers in the mouth, laid the body of the child on that arm, and fixed the fingers of my right-hand over the shoulders, on each side of the neck. Having taken a firm hold with both hands, I tried, in a slow and cautious manner, to bring down and extract the head, by increasing the force gradually, moving the face of the child backward and forward, sometimes altering my fingers from the mouth to the sides of the nose, sometimes quitting again these holds, and trying Daventer's method, by pressing down the shoulders, to bring the occiput out from below the ossa pubes. This method not succeeding, I again introduced my fingers to the mouth, but after exerting greater force, and pulling the body of the fœtus upward, downward, and from side to side, I was obliged to rest, and began to despair of saving the child's life. The woman all this time behaved with great courage, and assisted with all her strength, by forcing down when I desired. As there was still a weak pulsation in the funis, I resolved to make another effort with all my strength, by which the head was moved a little lower; then forcing up my fingers to the forehead, I got a firm hold on it, and finished the delivery.

The force used in turning the child had loosened the placenta, and brought on a large discharge of blood, as in the former case, a circumstance which commonly happens in such deliveries. As the after-birth followed the delivery, I wrapped it in the receiver with the child, and laid all on an assistant's lap near the fire, without tying and separating the funis, because I still found a creeping motion in the arteries. After having moved the patient from her uneasy position, and farther up from the foot of the bed, I tried the common methods to assist the recovery of the child. Soon after the infant showed some weak signs of life, and in about ten or fifteen minutes began to cry, and breathe with more freedom: that which had the greatest effect, was whipping his little breech from time to time, for which I ask pardon of my old friend and preceptor Dr. Nicholls.

As I suspected that the neck was over-strained in time of delivery, the head was gently pressed toward the shoulders; on the recovery of the child, I examined the mouth and all the limbs, to find if any thing was amiss. The infant continuing to cry incessantly while the head was washing, I examined, and perceived a large tumour above the right ear; I likewise found a depression of the temporal bone before the ear, and the frontal and parietal bones pushed outward; these formed the swelling, and were the parts that stopped at the distorted bones of the vertebrae. On pressing the tumour with my fingers, the child was quiet, but on removing them from the part, the bones were again pushed out, and the child fell to crying; by repeating the same experiment more than once, I was convinced that this was the occasion of the complaint. Having applied a thick compress, moistened with oil, vinegar, and spirits, on the tumour, and secured it with a proper bandage, I desired the nurse, if this was not sufficient, to continue to assist with her hand as before; for I did not choose to bind the head too tight, as such fits of crying never happened in my practice, either before or since. I was glad to find next day, that the swelling had disappeared.

The child was smaller in this case than in the former, and the mother recovered better than in any of the preceding labours. The difficulty that attended the delivery of the head, made me resolve to use the long forceps, as in No. i. case vii. of this collection.



## C A S E III.

BEING called to a watchman's wife, the midwife told me that the waters had come off in a large quantity, on which the arm was forced down into the birth, and the hand appeared without the external parts; she had tried different methods to make the child (as she ignorantly imagined) withdraw up its hand into the womb, and change itself into the natural position; dipping its hand into a basin of cold water; and also in vinegar and brandy; but finding these trials fail, she had recourse to the last remedy, before any assistance from a man-practitioner was thought necessary; she directed the woman's husband to take hold of her legs over his shoulders, and lift up her body three times, with her back to his and her head downwards; being of opinion, that although the former methods failed of success, this would answer expectation. On examining this case, I found by the hand and fingers that the left-arm was come down, and that the fore parts of the fœtus were probably to the right side of the uterus. I promised to support the woman in her lying-in; and, on this consideration, the gentlemen who then attended me for their instruction in midwifery, were allowed to be present at the delivery. Finding I could not keep the patient in a firm position, when on her side, I had her turned to her back, with her breech to the bed's feet, two of the gentlemen sustained her legs; her head was supported by lying in the midwife's lap, the midwife was seated on the bolster at the head of the bed, to keep her firm in that position, and restrain her arms, so as to prevent her hands from pulling at the assistants or me in time of the operation. As the arm of the child was but little swelled, I easily introduced my left-hand below it, into the vagina; then pushing up the shoulder, insinuated my hand betwixt the breast and the right side of the uterus; but finding, after several strong efforts, that I could neither raise the shoulder higher, nor push my hand sufficiently up to come at the feet, I altered her position in the following manner:—Observing that the midwife kept the woman's head and shoulders too high, I made her sit farther up on the bed; that they might lie lower; but my hand and arm being by this time cramped and wearied, with working in too great a hurry, I was obliged to withdraw both, and rest a little. Considering that my other hand could not, in this position of the woman, reach the legs of the child, which were at the right side, I turned her to her knees and elbows, and had her supported in that posture by the assistants on the bed. I then insinuated my right-hand, and gradually stretched the contracted uterus, when I found the feet were turned up to the breech at the fundus. I now endeavoured, with all my strength, to push farther up, so as to make more room to take hold of the legs; but the woman being strong, and struggling incessantly, we could not keep her in that position; so that all my efforts to bring them down proved abortive. This hand and arm last introduced being likewise cramped, I was obliged to withdraw them, and I began to despair of succeeding without the assistance of the crotchet; but I resolved to make one effort more. Finding we could not keep her steady in this last position, I had the bed raised very high at the feet with bolster and pillows; then she was laid again in the supine position as at first, her breech being raised much more, with her head and shoulders very low. My left-hand being now pretty well recovered from the former fatigue, I introduced it as at first, and at last reached up to the fundus uteri; I now brought down one of the legs, and delivered the

the child, with the assistance of the noose, as in the former case; but with much less difficulty, as this woman had a much larger and better formed pelvis.

The child was alive; the mother recovered, and the placenta being loosened in time of the operation, followed the delivery. She continued weak for three or four weeks, and complained of great pains in the abdomen and neighbouring parts; but having had large discharges at first, and being carefully attended, and kept in breathing sweats, the lochia and milk were so promoted, as to prevent, in all appearance, the danger from a violent inflammation of the uterus.

Although I had been called to many such difficult cases, yet I was never more fatigued. I was not able to raise my arms to my head for a day or two after this delivery; and one of the gentlemen who was present, being of a delicate constitution, was so much intimidated, that he resolved never to venture on the practice of midwifery.

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#### C A S E IV.

THE midwife told me that I had formerly been with the same woman, who recovered slowly after a tedious labour; that this would prove a more dangerous case, for that the arm of the child came down immediately after the membranes broke, on which there flowed from the womb a large quantity of waters. She also informed me, that as the hand was without the birth, she had folded it up in the vagina, to keep it warm till I should arrive. The patient was then lying on her left side across the bed, with a pillow betwixt her knees. I moved her breech to the side; then brought the hand again down out of the vagina, and told her it was the right, to prevent reflections, if that limb should prove lame after the delivery. I had found such complaints proceed from the midwife's pulling at the arm, and trying to bring along the body in that manner; but this notice being given, the accoucheur could not be blamed for over-straining the limb and the misfortune would be imputed to pressure or cold, while the arm lay in that position. Finding by the arm of the child, that its fore parts would probably be to the left side of the uterus, and also that the abdomen of the patient was very pendulous, by its hanging more than usual over the pubes, I perceived that I could operate with greater ease while she lay on her side, than when lying in a supine position. I introduced my right hand into the vagina; and in pushing up the shoulder, could distinguish, that although the pelvis was narrow, the child was not large; that the breast was forward, but toward the left side, the head turned back on the shoulders to the opposite side. The contraction of the uterus being very great, it would have been impossible to bring down the head to present in the natural way; my endeavours for this purpose would have served only to fatigue the patient and myself with vain labour. My hand being so far advanced, I pushed it up farther and farther, along the left side of the uterus, to come at the legs of the child; but the patient's head and shoulders being too high, this circumstance, joined with the force of the breast and abdominal muscles, in her strainings against me, prevented my hand going up sufficiently to reach these parts. Being afraid to bring down my right hand from the contracted womb, I slipped my left under her left hip, and by the help of the assistants turned her to her knees and elbows. *Vide* case v. By this method, both the pressure of those parts, and the weight of the child, being much abated, the abdomen sunk downward, though at the

same time her thighs and knees kept the belly above the pubes; at last my hand penetrating to the fundus uteri, took hold of the feet betwixt my fingers; then pulling them down, and pushing up the breast, I, after a good deal of fatigue, brought the legs without the os externum; I now turned the patient to her back, and with safety delivered both her and the child, although the head stuck some time in the passage, and both force and caution were required to extract it.

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C A S E V.

I WAS called to a labourer's wife. Her midwife, on pretence of being sent for to another, had left her soon after the membranes broke, assuring all present that the child presented properly; and she promised to return in time for the delivery; but on examining, I found both the arms down at the os externum, and the breast presenting at the upper part of the vagina. After every thing necessary was prepared, I had the patient laid across the bed in a supine position, with her breech high and her shoulders low. As the pelvis was large, and the arms of the child small, I, in time of the labour-pains, stretched the external parts, and introduced my hand into the vagina up to the breast of the fœtus; in raising this, and examining the situation, I found the head was cast back above the pubes. As the breast of the child was toward the sacrum, I pushed up my hand betwixt the abdomen and the back part of the uterus, and then went higher and higher in a slow manner; and by intervals stretching the womb, which was strongly contracted, I found the thighs, knees, and legs, doubled up to the fundus; but not being able to come at the feet, which were cast forward on the breech, I hooked my fore-finger into the hams. The purchase not being sufficient, I let go that hold; and at last getting one of the feet betwixt my fingers, I brought that leg down to the vagina. This was not effected without a good deal of fatigue, in pulling down the foot, and pushing up the breast; but not being able to bring down the other, I was obliged to rest some minutes, to recover the strength of my hand and arm. Having procured a soft garter from one of the assistants, I formed it into a noose, and tried to introduce and fix the ligature round the ankle of the child; but the foot was too high to admit its being applied properly. I was again obliged to introduce my hand into the uterus, and by pushing up and pulling down as before, brought the foot without the os externum; then, with the assistance of the noose, I altered the bad position, by raising the head and breast to the fundus uteri, bringing down the breech of the child to the lower part of the womb, as in case ii. The arms of the fœtus, by this movement, returned into the uterus, and afforded more room to bring down the other leg. Having wrapped a cloth round both, and finding, on extracting the thighs and hips, that the belly of the child was toward the pubes, I turned them to the sacrum. As the body came easily along, I did not bring down the arms, neither did I introduce my fingers to the face, to turn the forehead into the concavity of the sacrum; but by pressing down the shoulders of the fœtus, brought the occiput out from below the pubes.

The child lay a long time seemingly dead, but at last recovered. In the mean time, one of the assistants imprudently telling the patient it was dead, she was immediately thrown into convulsions, and with difficulty removed from instant death, by applying stimulating things to her nose; and when she retrieved the use of her senses, the cries of the child contributed greatly to her recovery.



## C A S E VI.

**T**HE waters, in this case, had been discharged many hours; the head was at the upper part of the pelvis, and did not advance lower, although the pains were strong and frequent; but as the patient grew weaker, and was every now and then attacked with fainting-fits, the midwife apprised the friends of the danger, and desired them to send for my assistance. I had the woman secured in the same position as described in the foregoing case; and in pushing up the face and head with my left-hand to the left side of the uterus, found the fore parts of the child were to the back part of the womb; but in tracing farther up to search for the feet, the strong contraction of the uterus pressed the head with such force against the muscles of my arm, as to benumb my fingers, and gave me so much pain, that I was obliged to withdraw that hand. The patient's position being altered by her shrinking from me, I brought her breech again to the side of the bed, and desired the assistants to hold her in that situation. Encouraging her, by promising to do all in my power to save both the child and herself, I introduced my right-hand into the uterus, and delivered nearly with as great force and fatigue as in the above case. As the child, however, was large, I could not bring out the head in that manner, but was obliged to deliver it as in case ii.

## C A S E VII.

**B**EING called one morning early, the midwife informed me that she had delivered the patient several times, that her labours were soon over, the children always following the rupture of the membranes; that although the head presented in this case also, she was afraid the delivery was obstructed by a large excrescence, which she imagined filled up the back part of the passage. The waters had come off the day before, and the woman had been in strong labour all night. When I first examined forward, and toward the pubes, I was deceived as well as the midwife, by imagining that the child's head presented in the natural way; but in making another trial in time of the next pain, introducing the first finger of my right-hand farther up, and backward toward the sacrum, I found an uncommon soft substance, which I felt all around. At last, with some difficulty, I discovered that it was the face. The cheeks were so much swelled, that the eyes, nose, and mouth, seemed as if buried betwixt them, and the chin was backward toward the left side of the pelvis. The woman's strength being much exhausted, and the child in danger of being lost in this bad position, I resolved to try either to alter the presentation, or deliver in the preternatural way. Having, as in some of the former cases, ordered the patient to be secured and kept firm in the supine position, I gradually dilated the os externum, and raised the head above the brim of the pelvis; but the contraction of the uterus was so great, and that part of the child so slippery, that I could not raise up the face so as to bring the vertex to present in the natural way. The patient had made strong efforts in straining down against me during this trial. I now rested a little, to observe if the face of the child would come down lower in the pelvis, so that I might be able to assist the delivery with the forceps; but after waiting some time, and the labour-pains being weak, I at last, by using a good deal of force, pushed up the head to the fundus uteri. The legs were brought down, and the child delivered as in the former case. The face was livid, and excessively swelled; but these appearances went off in a few days.

## CASES VIII. and IX.

**B**EING called to a woman, the midwife informed me that the waters had been coming for twenty-four hours, and although she had tried several times to assist the delivery, by pulling at the arms of the child, which were come down before the head, yet the presenting parts stuck so fast in the bones (meaning the pelvis) that she could not bring them lower; and therefore had, as it was a desperate case, sent for my assistance. On examining, I found both arms come down much swelled, and backward toward the sacrum, with the head advanced a little, in a conical form, at the fore part of the pelvis. Considering these circumstances, observing the patient greatly exhausted with the length of the labour, the pains weak, and being certain that the child was still alive, from the motion now and then of its little hands and fingers, I resolved to deliver, if possible, in the preternatural method. Having ordered the woman to be laid across her bed, and secured in the supine position, I introduced my hand into the vagina, and pushed up the child's head to the fundus uteri, then the arms returned into the womb. After much fatigue, I brought down the feet from the back part of the uterus, and delivered the infant, as in the former case. I did not know, at this time, the method of fixing a noose on the ankles; therefore the operation was the more tedious, in pushing up the body, and pulling down the legs sufficiently without the os externum, so as take a proper hold of them with my other hand. In this operation I was obliged to rest every now and then, and also to change my hands several times.

The patient recovered; but from the ignorance and imprudence of the midwife, in not sending sooner for assistance, the helpless child lay moaning and crying for many hours before it expired; for by her pulling at the arms, they were so over-strained and tumified, as to bring on a mortification of these parts.

In the other case I was certain, as well as in the preceding, that the child was alive, by feeling a strong pulsation in the vessels of the umbilical cord, which lay in several folds at the left side of the pelvis. The midwife informed me that she had felt the same motion immediately after the membranes broke; that the head of the child, although a large quantity of waters had been discharged, still kept high; and that being afraid, if the labour was tedious, the child would be lost, she had desired the friends to have recourse to my assistance, more especially as the woman's former labours were commonly tedious, though safe. As the patient was then lying in bed, on her left side, and kept steady in that position, I introduced my right-hand into the vagina, and examining the position of the child's head, found that the vertex presented, with the fontanelle to the same side of the pelvis, where the funis was come down. After this enquiry, I pushed up the head, and tried to slip and pass the cord above it, to prevent the pressure and obstruction of the umbilical vessels, but finding, as I pushed up the different folds of the funis, they again returned alternately, and eluded all my endeavours to raise them so as to remain above the forehead and face of the child, I had recourse to another method; I introduced my hand into the uterus, and delivered in the preternatural way, as described in cases vi. and vii. of this collection. When the head is not uncommonly large, nor the pelvis narrow, this method of delivery seems most adviseable to save the life of the child; for unless a very small part of the funis is come down, it seldom can be slipped up so high as to prevent the pressure of the head, and obstruction of the circulating fluids in the umbilical vessels.

## C A S E X.

THE patient I had formerly delivered twice of dead children; her pelvis was narrow, and distorted at the upper part of the sacrum. She had both times been long in labour, and much exhausted before the friends desired my assistance. The heads of both fœtuses were squeezed down of a great length, and so engaged in the pelvis, that she could not be delivered with the assistance of the fillet in time of the weak pains. As the waters had been long discharged, and the uterus was strongly contracted, it was impossible to push up the heads so as to apply the fillets to advantage, or to turn the children, so as to deliver them in the preternatural method; but at last, after waiting a considerable time, I had been obliged to open the heads with the scissars, and extract with the assistance of the blunt-hook. —*Vide col. xxxi. case viii.*—As it required a considerable force to deliver, after the heads were diminished by the large discharge of the contents, I questioned much, though I had then known the use of the forceps, if I could have saved them with that instrument; for I can very well remember the fatigue I endured at these two labours.

As a ridiculous opinion prevails among the vulgar, that there are certain remedies to procure barrenness, and indeed such described by many of the oldest authors, the woman's husband, and some of their friends, called on me soon after the second delivery, and begged I would prescribe some medicines of that nature. I acknowledged my ignorance of the effects of any such medicines, and desired them not to throw away money in going about to any false pretenders to such secrets, but to send for me at the beginning of the labour, if his wife should again prove with child. My advice was taken, and I was called accordingly; but before I arrived, the membranes were broken, and most of the waters discharged. On examining, I found the head of the child resting above the pubes; not, as in the former cases, forced down into the pelvis. Although it required much force to deliver the body and head in the preternatural way, yet this being smaller than any of the former children, it was happily saved; but I neglected, at this time, to examine if all the limbs were sound. The father calling on me about three months after, told me the child had not the power of her left arm. Some weeks after this visit, happening to be in that part of the country, I found the shoulder had been dislocated in time of delivery, and endeavoured in vain to reduce it.

I was again called a fourth time to deliver the same patient. I turned and brought this child the preternatural way; but it being much larger than the last, was lost by being obliged to tear down the head with the sharp crotchet. After I settled in London, a gentleman who succeeded me in that branch of business, wrote me that he had delivered the same patient, but that he could not possibly save the child. The said woman was delivered of her last child in the same manner I had chosen the delivery of the two first children.

## C A S E XI.

THE woman had been delivered of her first child by another practitioner, who was obliged to open the head of the fœtus, and extract it with the assistance of the crotchet. When she was in labour of her second child, and only gone seven months, I was called, and as the arm presented, delivered and saved the fœtus, by bringing down the legs, and extracting the body and head in the preternatural method. In her next pregnancy, she  
went



went on to her full time of reckoning. Being called to her some hours after labour had come on, I found the os uteri largely open, the membranes broken, and the head of the child presented. As she was then in bed, and lying on her left side, I had her turned to the right, that the uterus might be more in the middle, and give the fœtus a straighter position, to be forced along with the labour-pains; but the head did not advance. Considering that the first was lost by waiting for the natural delivery, that the second was saved by the preternatural method, and as this, by the touch of the head, felt small, I thought it safer to turn, apprehensive that the patient being weak, and of a consumptive constitution, she would not have strength to force along the head through such a distorted pelvis.

Finding that this position was uneasy to the woman, I had her again turned to her left side; but introducing my right-hand into the uterus, and finding the legs of the fœtus to the right side, without being able to reach them in that position, I was obliged, by the aid of the assistants, to place her on her knees and elbows, according to Daventer's method. The narrow pelvis cramped the muscles of my arm so much, that with difficulty I got my hand so high as to bring down the legs; then I turned the patient to the supine position. The woman having been much fatigued, I gave her a cup of warm wine, with ten drops of tinct. thebaic; but a flooding coming on, I was obliged to deliver the child immediately; being larger than I expected, it was lost in extracting the head. The force exerted in turning the child had disengaged the placenta, which was the occasion of the flooding. The pelvis was so narrow, that although I used all the precautions described in the former cases of this collection, yet I could not deliver the head so fortunately as in my former attendance on this patient. As the mother recovered with great difficulty, I was sorry, on reflection, that I had hazarded this method in so weak a patient; I wished I had rather waited the efforts of nature; and if these had proved insufficient, that I had used the forceps, when the head came low down in the pelvis; or at least, if all her efforts had been insufficient to render that assistance practicable, that I had delivered the child as in her first pregnancy.

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### C A S E XII.

*By Mr. Aires, of Boston.*

THE woman was attacked with colic pains and convulsion fits. He was obliged to bring the child footling, from its presenting with the arm; this he easily effected, till it was extracted to the shoulders, where it stuck pretty much, and gave him great trouble in bringing down the arms. Then he tried, with his fingers in the mouth, to deliver the head, by pulling it upward toward the pubes; but finding a great resistance, and pushing his fingers farther up, he found the placenta down in the back part of the pelvis; which last being very strait, had forced the head so against the pubes, that it resisted all the force he durst apply. He then introduced a finger between the head and that bone, to disengage it; but it answering no purpose, he seated himself on the floor of the room, and ordering the woman's breech to be brought a little over the side of the bed (she lying in a supine position) he delivered the head by pulling the body of the child downward. The child was dead, and, luckily for the woman, small in size; so that she recovered very well.

*CASE XIII. and Supplement to CASE III.*

From Dr. Durban.---Vide Collect. xxxiii. N° ii.

**I** WAS called to Mrs. S. a well-made woman about 35, who had several children. I found with her two midwives, who acquainted me that the waters had been come away about eight hours. Her pains were strong and quick. Upon touching her, I found a hand presenting in the vagina. While endeavouring to distinguish which hand it was, it protruded through the os externum to the elbow. This was the first case that offered to me in this country; and as I was apprehensive the head might perplex me if I delivered footling, I endeavoured to return the limb, and facilitate the natural delivery of the infant. The limb could be returned into the vagina only, whence it often protruded. The contraction of the uterus was too strong to admit my changing the position of the child, by forcing up. My hands became cramped, I was obliged to quit that attempt; but during these endeavours, I discovered that the shoulder and back presented, with the head lying to the left ilium. After refreshing my woman with cordials of her own, and encouragements, while I rested my hands, I searched for the feet, which were quite up at the fundus uteri; these I secured between my fingers, and the arm re-entered as I brought them down. When I had them just without the os externum, I wrapped a piece of fine cloth about them, and held them gently, drawing with one hand, while I endeavoured to assist the position of the face with the other slipped up along the sternum. I found some considerable resistance push up the hips a little, and gave the quarter-turn. I then proceeded, and delivered the infant, with a turn of the umbilical cord about its neck; this I divided instantly, and extracted the placenta. After resting a little while from her fatigue, my patient was put to bed; the child lived about half an hour.

*CASE XIV. and Supplement to CASE III.**In a letter from Mr. Mudge, Plymouth.*

**H**E was sent for to a woman who had been four days in labour, and the waters had passed off three days before. He found her very weak, and her pulse was very much depressed. On touching her, he was very much surprised to find the arm hanging out of the os externum, and the shoulder quite filling the mouth of the uterus; it was extremely swelled, and quite black with the violence it had suffered for three days successively, by the rude pretended assistance of the midwife. The cord came down by the side of the arm, the pulsation of which was evident enough.

He without great difficulty (the pains being luckily absent) pushed up the breast of the child, introduced his arm quite to the elbow into the uterus, before he could come at the feet, which he took hold of. The arm soon went up, and the delivery was accomplished; he wrapped up the child's arm in port wine. It was a stout boy, and both it and its mother did very well. No labour could have a more unpromising appearance, and yet it turned out very easy; the whole did not last above six minutes. Mr. Chapman, in his *Treatise of Midwifery*, page 111, relates a case, in which the arm was taken off; the child was alive, and lived to be a man.

## CASE XV. and Supplement to CASE IV.

*In a letter from Mr. Mudge, of Plymouth; with an answer.*

HE was called to a patient an hour after the membranes were broken. She had some slight pains; but he could not, in examining, reach any part of the child. After she had been two days in a lingering way, he at last felt some part presenting like the nates. She had not felt the child stir for many hours, and the meconium began to come off; although the pains gradually increased, yet the child did not advance. The patient's strength failing, he laid her across the bed, and introducing his hand into the vagina, found that the right shoulder presented, with part of the arm, not fallen down into the passage, but lying across the os uteri. He then insinuated his hand into the uterus, along the belly of the fetus, to search for the feet, and with great difficulty got down the left leg; but could not bring it without the os externum so as to get a cloth round it, in order to assist the turning. He tried the noose several times; but it would bear no great force without slipping. A flooding coming on from the great force used in trying to bring down the other leg, which, with the breech, hung over the pubes from the abdomen, being very pendulous, he changed hands, the right being excessively fatigued, and endeavoured to come at the other foot with his left-hand; but it was quite out of his reach, nor could he in the least turn the child at all; though he pushed up the shoulder with great force, while he tried at the same time to pull down the leg that was in the passage.

All this time the woman was bleeding excessively, and he was afraid every moment that she would die under his hands. He then sent for the largest sized forceps that is used in extracting the stone, and laid hold of the leg with them; but after several fruitless attempts could not move the child. He was almost fatigued to death, and in the greatest anxiety of mind to think he should see his patient die under his hands. He determined to make one final attempt to come at the right leg; he introduced his hand and arm into the uterus, and pushing still higher and higher, he at last got his arm so far till his elbow was in the middle of the pelvis. By which means he had now an opportunity of bending his arm over the os pubis, and got hold of the foot, which he immediately grasped and brought down to the passage. The buttocks following, he soon delivered the child, which was very large and dead. The placenta was soon delivered; the flooding stopped at once, and the mother did well.

*The answer to the foregoing letter.*

I HAVE had several cases wherein I have had much the same difficulty, and have been greatly fatigued before I could bring down the legs; especially in pendulous bellies, where the legs of the child were to the fore part of the uterus. The woman is kept much firmer when laid in the supine position, and you come at the legs easiest when they are toward the back part or sides of the uterus; but when at the fore part you find them better, by having the patient lying on her side; because then you can stand behind, and your arm is not interrupted by the pubes so much as when in a supine position. I have also of late found, where the belly has been very pendulous, and I could not reach the feet easily in the side position, that by turning the woman to her knees and elbows, I came much readier to the feet, as that position takes off the great pressure of the uterus and child. This was Daventer's method; and to confirm you in this practice, I send you a



paragraph of a letter from Dr. Gordon in Glasgow, who is my old acquaintance, and senior practitioner in the art of midwifery. I had before that wrote to him, and desired the favour that he would communicate to me the most material things which he had found in his practice that might be of use to the public.

The following, I own, has been of use to myself; having oftener used his method since than formerly, especially where the abdomen is pendulous, as your case was:—He writes, that one of the principal things to be known in midwifery, is the position that the patient is to be placed in when you want to turn the child and deliver it by the feet; and that is to place her on her knees and elbows, with her breech raised higher than her head; for you operate much easier with your hand downward than you can do with it upward, when she is laid on her back; besides the weight of the child assists you when you push the body back, in order to get hold of the feet. He says he always found this the best posture, until the feet are descended to the os externum; when he turns the mother to her back and delivers her.

#### C A S E XIV.

*In a letter from Mr. J——, dated P——.*

**H**E was called in by another practitioner, where the chin had presented. The first had several times tried to deliver with the forceps, and broke the lower jaw with his fingers. He then essayed to turn and deliver it by the feet; and in endeavouring to bring down one leg with great force, it was pulled off; a flooding coming on, and his strength being quite exhausted, the other was called. The woman's strength was almost gone. He introduced his hand into the uterus, and after great fatigue and sweating, he got hold of the other foot; over which he fixed a noose, which he twisted round one hand, while with the other he raised up the head and breast, and got the body delivered. It stuck at the shoulder, but by giving it a quarter-turn the obstruction was removed, and at last the head was delivered, though not without a good deal of trouble and caution; on account of the largeness of the head, and the bad hold at the broken jaw. The child was dead, and the woman expired in seven or eight minutes from the great flooding. I wrote him, that no doubt the gentleman, since he did not succeed with the forceps, acted right in trying to turn; but then, when it required so great force (which undoubtedly brought on the fatal hæmorrhage) it would have been safer for the woman had he opened the head as it presented, and extracted with the crotchet. However, it is impossible to judge, except when present; and we are too ready to reflect, after an unlucky case is over, that another method would have been better, though we acted then to the best of our judgment.

#### C A S E XVII. and Supplement to C A S E II.

By Dr. G. of L.—Vide Collect. xxxv. Cases xxi. and xxii.

**T**H E woman was about thirty; had been rickety in her youth, one shoulder was higher than the other; one of the ossa pubis was considerably farther protruded than the other. Before she was called she had been three days in labour. The mouth of the womb was largely open. The head was well advanced in the pelvis. She had frequent pains; but the

head

head did not advance farther. On introducing his hand he found a great moisture, and withdrawing it perceived it besmeared with meconium; whence he told the by-standers, that the child was either dead or very weakly. On enquiry; he was told that there had been no stoppage of urine. The position being such as favoured the use of the forceps for extracting the child, he introduced it accordingly, not doubting to find an easy delivery, as he had often seen and experienced with the help of that instrument; but, contrary to expectation, he could not move it with all his force. After this he withdrew the forceps, and raised the head of the child; on which the urine flowed out to an incredible quantity. Believing the distention of the bladder had hindered the head from advancing, he again tried the forceps, but could not mend the matter. On examining, he found he could introduce his hand without much difficulty; he then turned the child, and extracted it by the feet, after being fatigued almost to death. The woman recovered.

He desired my opinion of the labour; and begged to know if I thought it not always safer in rickety patients to turn the child. I wrote to him, that I had oftener than once, in the beginning of my practice, in those cases, brought the child footling; and although I had sometimes succeeded, yet in others, I could have wished, after the head was turned up into the uterus; that it were still in its first place; because when the body was delivered, the head stuck so above the pelvis, that it was not possible to save the child; and the parts of the woman were so bruised, that if she did not die, she recovered with great difficulty; that no doubt it was our duty to do all we could to save the child, but not so as to endanger the woman's life; however, in this case, as he could so easily introduce his hand; I thought it was right to try that method to save the child's life.

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### C A S E XVIII.

*From Mr. J. Giffson, Surgeon, in Harwich.*

**I** WAS called to a young gentlewoman of a delicate constitution, in labour of her first child. The midwife had been with her the greater part of the preceding night. She told me that the waters broke at five in the morning; that the patient had no pains since, except a few slight ones, which were chiefly in her back and loins; that the parts were so tight she could make no way for the child; but she felt nothing uncommon. Upon examination I found the os externum so tight, that I had scarce room to introduce two fingers; but with my first, I felt the arm much swelled, and far advanced in the vagina in a doubled form, the fore-arm being reflected upward. The os externum felt thick, but lax and yielding. Being satisfied in these particulars I could with great certainty foretell the difficulty that would attend the delivery, which I at last surmounted in the following manner.—Finding the patient had not been much fatigued; either by the pains or midwife, I placed her upon her side, with proper assistants to support and keep her steady in bed. I first began to lubricate and dilate the parts gently; by which means, in about half an hour, I made room for the admission of my hand, which I introduced in a flattened form to the brim of the pelvis, which I felt narrower than usual, occasioned by the last vertebra of the loins and upper part of the sacrum being too near the ossa pubis. I found also the top of the shoulder of the child entering the brim of the pelvis, the breast toward the sacrum, the head over the pubes, and

the feet at the fundus uteri. I endeavoured to raise the presenting parts, and bring down the legs; but the dryness and strong contraction of the womb, which, together with the pains, now acted forcibly against me, soon convinced me that it was impossible even to move them an inch. This method not succeeding, I pushed up my hand, by which I stretched the sides of the uterus, and by that means with great difficulty reached the feet, which I endeavoured to bring down; but my hand and fingers were now so cramped that I could not move them. I rested a while; in which interval the patient was seized with a deliquium, which took off the pains and contraction, so as to give more liberty to take hold of one leg, which I brought down as far as the bending of the knee would allow me; but could not bring down the other. Having brought out my hand, I placed a noose upon my fingers, and with great difficulty I put it over the ankle; then taking hold of the garter with my external hand, I pulled down with this, and shoved up with that in the womb; and by these means turned the head and shoulder to the fundus uteri; the leg was brought through the os externum, and the thigh into the vagina. Having succeeded so far, I withdrew my hand from the womb, and assisted with both externally, pulling from side to side, and giving the proper turns (according to your directions) till the body was extracted as far as the breast. Finding the body was obstructed in coming farther, by the arm lying across, I brought down that, and then the other; and after the shoulders were come through, I with two fingers in the mouth pulled the chin to one side, and brought it into the pelvis; then turning the patient to her back for more liberty, moved the forehead to the concavity of the sacrum, and delivered the same with a half-round turn upward. I tried all the common methods to recover the child; but to no purpose. The patient enjoyed a good night by the help of an opiate, and is now quite recovered.

## COLLECTION XXXV.

*Preternatural cases, wherein the women were delivered by the assistance of the crotchet.*

[Vide Part i. Book iii. Chap. iv. Sect. v. No. i. also Tab. xxxv. and xxxvi.]

### CASE I.—*Vide Collect. xxxii. Case i.*

**A** MIDWIFE who was attending a woman in the country, found as she imagined, after the membranes were broken, that instead of the head one of the arms was pushed down into the vagina, and acquainting the friends with this circumstance, they immediately sent for me. I found, when I examined, that instead of an arm there were two legs lying double in the vagina, and the knees presenting; at first indeed I found but one, which was lower than the other, and I imagined it was an arm, as the child was but small; but going round the vagina with my finger, I felt the other; I distinguished the knees by their having a more obtuse feel than the elbows; and bringing one of them through the os externum, was much better pleased to find it was a foot. Having placed the woman in a supine position, I brought down the other leg; and having wrapped a cloth round the feet, I pulled the child gently along. As it was one of the first cases of this kind which I had seen, I had not the precaution



to introduce my hand to feel, before I brought down the body, whether the head was low down or up toward the fundus ; for after I had brought the breech down to the os externum, and turned the back part of it from the right side of the pelvis to the pubes, I could not bring the body lower down than to the small of the back. Finding, after reiterated trials, that it would not move farther, I pushed up the fingers of my right-hand along the belly of the child, and found the head folded down on the breast at the side, and both squeezed together in the pelvis. I tried to push up the body and my hand farther to raise the head ; but the body filling up the pelvis, and the head and breast being squeezed together by the former force in pulling down, I could not, after several trials, alter the position. I was then obliged to pull down the body with greater force, till I found, after repeated trials, that the vertebræ of the loins were so over-strained it was impossible to save the child. I then introduced the crotchet up betwixt the head and the breast, and fixed it on the middle of the sternum, as I afterwards observed, pulling the instrument with my right-hand, and the body of the child with the left, I endeavoured to extract. Finding the parts tear down, and that the shoulders did not advance, I pushed the crotchet farther up, and got a firm hold above one of the clavicles, which brought down the shoulders, and the head followed with little difficulty, the child being small. This was a caution to me in the sequel, to examine the position of the head before I brought the breech into the passage, that I might raise it, so as to prevent any such obstruction.

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*C A S E II.*

**B**EING called to a midwife in the morning, I was told that the membranes had broken about eleven at night, that the breech presented ; and though the pains had been strong, yet it had not advanced in the least for two or three hours, notwithstanding the efforts of the midwife, who had tried several times with all her force to bring it along. As the woman and the pains were now weaker, I tried, while she lay on her side, to help along the breech, with the assistance of my fingers introduced to the outside of each groin. This method not succeeding, I pushed up the breech with my right-hand to bring down the legs, which lay extended up the fundus uteri toward the left side ; but the contraction of the uterus was so great, that although my hand was up at the legs, I could not possibly bring them down, the pressure of the breech, which I could not raise higher than the brim of the pelvis, joined with the narrowness of the same, so pressed and pained the muscles at the fore part of my arm, that I was obliged to withdraw it two or three times. These attempts proving abortive, I turned her to her knees and elbows, and introduced my left-hand as the most proper when in that position, and the legs to the left side. The breech receded farther, and my arm was not so much confined ; but the contraction of the uterus was so great at the fundus, that I could not possibly bring down the legs, although I rested several times, to keep up the strength of my hand and arm ; at last they were so fatigued and cramped, that I was obliged to desist. Being afraid of tearing the uterus from the vagina, I altered her from this position to her back, keeping her shoulders high, and tried again in time of a pain, to help the breech along, as at first, but to no purpose. I then had her breech raised with pillows, and her head and shoulders laid lower ; then I pushed up my right-hand that was a little recovered from the former fatigue, but failed in this also, after several long efforts.

I was now so wearied, that I was obliged to rest, and consider what was next to be done. The child, I found by these trials, was large; and the pelvis distorted at the upper part of the sacrum; and indeed the projection of these bones had bruised and hurt the back part of my hand at the last trial. By these several endeavours, the placenta, I suppose, being partly loosened from the uterus, brought on a discharge of blood, which made me afraid of tracing up again into the uterus. I attempted to bring the child double, with my fingers on the outside of the hips or groins in time of the weak pains; but finding this was to no purpose, I introduced the curve of one of the handles of the forceps on the outside (they were not then altered from crooks to wooden handles as now) betwixt one of the thighs and the abdomen of the child. When I found the point sufficiently through betwixt the thighs, I introduced two fingers of my left-hand to the groin of the opposite hip; then pulled with that hand, and the blade of the forceps with the other; but still finding this force was not sufficient. I introduced the handle of the other forceps at the other side, and pulled by both with greater and greater force, which moved the breech to the lower part of the pelvis, and the hams below the pubes; but I found in time of pulling, that one of the handles slipped from the joint on the thigh, which it fractured. I then brought down the legs, and after turning the fore parts of the foetus to the back part of the uterus, I brought down the body, and tried to deliver the head as described in the cases of collect. xxxii. where the legs or breech present; but all these different methods failing, I tried first to deliver the head with the short forceps; but they slipping several times also, I was obliged to take the assistance of the crotchet in the following manner.

As the body and arms were delivered, and the neck stretched to a considerable length, I directed an assistant to hold up the body of the child toward the pubes and abdomen of the patient; by which means I had more room to introduce the fingers of my left-hand up betwixt the right side of the pelvis and child's head; even this I was obliged to raise to come at the os uteri. I then, with my right-hand, introduced the crotchet along the inside of my left (the point toward my hand) to the head; then turning the point to the os frontis of the child, which lay to that side, I pushed up the instrument betwixt my fingers and the left temple (which lay toward the right groin) to the upper part of the frontal bones, where I tried to fix the point; but this being a straight crotchet (for I had not then contrived the curved crotchet, which is principally useful in this case) the point did not take sufficient hold, or go sufficiently up to fix in the skull, but slipped two or three times, and only tore down the scalp. I then withdrew the crotchet in a cautious manner. After having rested a little, I again introduced my left-hand in the same manner, but more backward, and the crotchet along the right temple, above the fore part of the ear, where at last with some difficulty I fixed the point. I now brought down my left-hand, took hold of the crotchet with it, I hid the body of the child on that arm, and placing the fore and middle fingers of my right-hand over the shoulders, and along each side of the neck, I began to pull down the head, and gradually increased the force. Finding the crotchet had a sufficient hold, and did not slip as before, and that the head did not yet begin to move, I stood up and pulled the body and crotchet upward to the pubes with great force, which brought down the forehead to the lower part of the pelvis, at the right side of the sacrum and os coccygis; then turning it more backward, I delivered the head, by bringing it with a turn upward from below the pubes, where it

turned

turned as upon an axis, and prevented the laceration of the perinæum and parts below, which at that time were stretched in form of a large tumour. I examined the child's head, and found the skull was tore open about two inches at the above-mentioned place, and some of the cerebrum had been evacuated in time of pulling; a circumstance which diminished a little the size of the head. When I was first called, I desired the midwife to allow my pupils to be present; a proposal to which she and the woman assented, but restricted the number to four, on condition that I should deliver her without any other consideration for my trouble. This case fatigued me so much, that I was scarce able to move my arms to my head next day; and although the weather was not warm, I sweated excessively.

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*C A S E III.*

**T**HE woman was young and strong. This was her first child; the membranes broke the day before; she had strong pains all night. When I arrived in the morning, I found the shoulder forced down to the lower part of the pelvis. Having placed her in a supine position, with her breech high and her head and shoulders low. I was obliged, after dilating the os externum slowly, to use greater force before I could raise the shoulder so as to introduce my hand into the uterus. I found that the left shoulder presented, the head was turned back to the right, and the fore parts to the back part of the uterus. The position being known, I tried to push up my hand to come at the feet, which were folded up to the fundus uteri, but turned in operating to the right side. Finding that I could not possibly reach them with my right-hand, which was now beginning to be weary and cramped, I withdrew it, and attempted to introduce my left; but the head was so firmly engaged at the right side, that I could not possibly gain admittance. I again tried with my right, and repeated one effort after another, changing hands, and altering the position of the patient, till I was at last excessively fatigued, and obliged to desist. I rested about half an hour, considering what I should do next, and waiting until I should recover the use of my arms.

By these efforts, and the exertion of great force, a considerable flooding was brought on; and this alarmed me not a little, especially as it was one of my first cases, and I had not yet attained that calm, steady, and deliberate method of proceeding, which is to be acquired only by practice and experience. I had over-fatigued myself, from a false ambition that inspires the generality of young practitioners, to perform their operations in the most expeditious manner. Finding I could not reach the legs, I insinuated my right-hand up to the left side of the child, and along that introduced a crotchet with my left above the ribs: there this instrument being firmly fixed, I withdrew my right; then taking a firm hold of the crotchet with that hand, I pulled down the side while I pushed up the shoulder with my left. By these means, after repeated trials, and using a good deal of force, the head and shoulders were so raised, that I was able to bring down the body double, and the head followed. I was glad to find, that although the child came in this manner, and all on a sudden, the woman was not at all lacerated or hurt. When I examined the child, I found the crotchet had fixed first on the left side of the belly, which it had tore open, as well as the false ribs; so that most of the contents were evacuated, and the body was allowed to pass along double. One mistake I made at first fatigued me much before I was aware: my hand had run up on the outside of the membranes.



## C A S E IV.

THE midwife told me, that when she was called the membranes were broken, and the hand lay in the vagina. A gentleman in the neighbourhood had been called, and attempted delivery; but hearing I was sent for, he took horse and rode off, being the same that was concerned in the case described col. xxxiv. N<sup>o</sup> i. case vii. I found the arm, shoulder, neck, and part of the ribs, pulled without the os externum. When I enquired of the midwife, if these parts were forced down in that manner by the pains? She said that before the other practitioner came, the pains had pushed the child so low that the arm came out; but that she had folded it up again into the vagina, and kept it there till he arrived. She owned, that after he had failed in attempting to turn the child, she assisted him in pulling at the arm with great force, but could not bring the body farther; and when he proposed taking off the arm, the woman desired I might first be called.

I then with the midwife, inspected the parts, because I could find no fundament, and showed her that the vagina and rectum were tore into one. The arm, though not much swelled, was livid, as well as the other parts of the fœtus that appeared externally; for it had lain in that manner three or four hours at least from the time I was sent for. I never expose the parts of my patients except on such extraordinary occasions, when it is necessary to observe whether any harm has been done.

After I had endeavoured, without success, to push up these parts into the uterus, first by placing the woman in the supine position, and afterwards on her knees and elbows, I was obliged to introduce the crotchet, and deliver the child in the same manner as directed in the former case. The parts were much inflamed; but by the application of bread and milk pultices, the swelling subsided, the lacerated parts digested, and she with difficulty recovered. About two months after delivery, being in that part of the country, I called at her house; and contrary to what I had observed in all other cases of such large lacerations, in which the parts are commonly so weak as not to be able to retain the fœces, the parts in her were so contracted, and the passage was become so narrow, that she voided them with great difficulty.—*Vide collect. xl.*

## C A S E V.

THE midwife called on me, and begged I would prescribe some medicine to promote the delivery of a woman whom she had attended two days; she said the membranes had broken soon after she went thither, and one of the arms coming down, was pushed without the parts; but she had kept it warm. I told her the woman should have then been delivered, and no medicine could do any service. In about two hours I was sent for, and found the fore arm without the os externum, much swelled. The woman was little, not young, and this the first child. I tried several times to push up the arm and shoulder of the fœtus, but was prevented by the largeness of the arm and smallness of the pelvis. I attempted to bend the arm (which was the right) so as to fold it up into the vagina, that I might push it up before my hand; but the swelling was so great at the elbow, that I could not bend it. I then pulled and twisted round the arm, and endeavoured to separate it from the shoulder, but could not with all my force. I pushed up the fingers of my left-hand to the arm-pit, and tried to snip through the skin and ligament; but it lay so high, and was thrown so much for-

wards.

wards by the distorted parts at the brim of the pelvis, that I could not get up my fingers or scissars sufficiently to that part. I wrapped the fore arm in a cloth, and pulled and twisted it with great force, so that at last it separated at the elbow. I was sorry for this incident, apprehending there was less hope of pulling off the arm when the firm hold of the fore arm was lost; however, contrary to expectation; I found the same advantage as if it had been pulled from the shoulder; for the arm being short, easily folded up in the vagina, to the side of the fœtus. I now gave both the woman and myself some respite, that we might recover from fatigue. Having resumed my labour, the arm and shoulder were pushed up into the uterus. Then I felt at leisure the position of the child. The head folded back betwixt the shoulders above the pubes; the left arm and leg lying over the breast, and to the side and back part of the uterus. I now repeated my efforts, and by pushing up higher, got a firm hold of that foot betwixt two of my fingers; pulling down this and pushing up the breast, I brought the leg down without the os externum. Having wrapped it in a cloth; and taken a firm hold with my right-hand, I pushed up my left, to try to bring in the right hip, which lay over the pubes; but found it impracticable to reach so high, on account of the narrowness of the pelvis. Endeavouring to pull the left leg and thigh, so as to bring the hips lower, after reiterated efforts, and increasing the force every time, instead of bringing the body lower, I pulled the thigh from the hip. I was obliged to rest again, to recover from this second fatigue. I again introduced my right-hand into the uterus, and with great difficulty brought down the right leg; but the pelvis being too narrow to allow passage for the body, which was large, I had recourse to the crotchet, with which I tore open the belly: I was obliged to use the same method in tearing open the breast, to bring down the shoulders and the arms; and afterwards to rest a considerable time to recover my strength, which was almost exhausted, before I attempted to deliver the head, which I was certain would require still a greater force. Finding the face and forehead were to the left side, and a little forward toward the left groin, after getting an assistant to hold up the body of the child, I insinuated my right-hand at the left side of the sacrum, and introduced a crotchet in the same cautious manner as described in the second case of this collection; along at the left side of the bones that were distorted, and formed a large hollow at that part, which allowed room for the instrument to pass easily. Having now altered my crotchet from the straight to the curved form, the point went higher up, and fixed near the vertex. Bringing down my right-hand, I pulled gently at first, till I found it was firmly fixed; I then began to extract with greater force, while at the same time I pulled the body with my other hand. By reiterating these efforts, I got the head at last delivered, but not before I changed hands, and was obliged to pull the crotchet with my left, which brought the forehead from the left groin, backward to the side of the sacrum. The crotchet had tore all the left bregma down to the temple; a laceration which allowed a large part of the cerebrum to evacuate, and the bones of the cranium to collapse. The great force used in turning the fœtus had brought on a flooding, which diminished on the delivery of the child and placenta; part of the last, however, adhered so firmly to the right side of the fundus uteri, that I was obliged to separate it with the fingers of my left hand. As the woman complained of great pain, and her pulse was a little sunk from the large discharge, I ordered an anodyne mixture, with 20 drops of laud. liq. and half an ounce of syr. e meconio, which had the

desired effect, by procuring rest, and a plentiful perspiration; and although the weakness and pains continued for many days yet she recovered.

About two years after I was again sent for; but being engaged, another gentleman was called, who told me that he was obliged to open the head, and was vastly fatigued in extracting both it and the body; this violence threw the woman into a violent fever that destroyed her. Probably the losing so much blood when I delivered her, might prevent the inflammation and fever. This case so fatigued me, that I was obliged to shift, and go to bed after I was carried home in a chair. My hands were so swelled that I could only use my fingers like a gouty person for a day or two.

#### C A S E VI.

THERE had been two midwives with this woman for two days; one of those was her mother. Both arms had been down most of that time, and these they had often pulled to bring the child as it presented. I found both arms pretty much swelled, and one was almost pulled from the shoulder; for it only hung by part of the skin, which I snipped off with the scissors. I inspected the part, and found the remaining arm and parts of the woman livid, but not tore. The patient was then flooding, and had lost a great deal of blood; from which, joined with the long fatigue of labour, her strength was so exhausted, that she appeared in a dying condition. I suggested my apprehension to the husband and friends; who begged me, if possible, to deliver her before she expired. Contrary to my expectation, although the breast was pulled low down, I easily pushed it and the arm up into the uterus, and brought the child footling. I had no hopes of her recovery, although she seemed to revive a little, from the joy of being delivered; because I was pretty certain that a mortification was begun, from the livid appearance of the external parts, and her complaining of no pain, when I introduced my hand into the vagina and uterus. The placenta was all detached, and lying loose in the uterus. This was not her first child. I was called in the evening, and she lived till next morning.

#### C A S E VII.

##### *The child delivered piece-meal.*

ONE of the arms had descended, and been so pulled by the midwife, that the shoulder was down to the os externum. I tried to raise the shoulder by passing up along the arm, which was excessively swelled and livid, it having been down in that position above 24 hours; but I could not introduce my hand. Considering that the child was probably dead from its being so long in that situation, and its not being felt to move by the mother for many hours, I thought it was most expedient to separate the arm from the shoulder. This last being low down, I guided the points of the scissors to it, and easily separated the arm; partly by cutting the skin and ligaments, and partly by pulling and twisting. In pushing up the shoulder into the uterus, I found that the pelvis was small and the child large. I brought down only one of the legs, which was pulled off, as in case v. then with great labour I brought down the other, which gave way also by the force of pulling. I was afterwards obliged to tear down the body with the crotchet, and even to fix the same instrument on the head. Being the straight kind, it slipped several times, and hurt the inside of my  
left-



left-hand in two places, while I guided the point from hurting the vagina of the patient. At last, gaining a firmer hold above the ear, I fixed the fingers of my left-hand over the shoulders, and pulled with great force, both at the body and crotchets. Finding it did not move, I wrapped a cloth round the shoulders, and pulled at them with so great force, as almost to separate the head. By these means the head was brought a little lower, yet not daring to exert again such violence at the body, I pulled by the crotchets, which brought the head down to the os externum; and in raising the body and pulling it upward, it at last separated. The head, however, being brought low, I took hold of the under jaw; and pulling at that, while I exerted more force at the crotchets, the head was also delivered. The woman behaved with great courage, although she had been much fatigued, and weakened by a flooding brought on by the great force that I was obliged to exert in turning the fœtus. This woman also recovered, contrary to every body's expectation.

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### C A S E VIII.

*The woman died before the os uteri could be sufficiently dilated.*

THE midwife told me, that when she was called, the membranes were broken; and although the mouth of the womb was very little open, she found that the child did not present fair. A gentleman was sent for, but he being otherwise engaged, could not attend. Mr. Smith was then sent for at six, and finding that the pains, which were frequent and strong, could not push down the presenting parts to open the os uteri, he tried to stretch it; but not being able to dilate more than to introduce two fingers, and a flooding coming on, he sent for Mr. Mackenzie, who then attended me as senior pupil. He likewise tried to dilate, and finding, although the os uteri yielded considerably, he could not possibly introduce his hand, he desired I would come about seven. He told me that the funis was fallen down into the vagina, and that he had not felt any pulsation in it; that he had dilated the os uteri considerably, but that his hands being cramped and fatigued, he was obliged to desist. I felt the woman's pulse, which was still pretty good, and not much sunk. Considering that the pains were now weak, and could do little service in pushing down the child to stretch the os uteri; being also afraid that the woman would grow weaker and weaker, and having never before failed in stretching the os uteri in women that had children before, which was her case, I resolved to attempt it without delay. I examined in the side position; but as that and the supine had been tried before, I had her placed on her knees and elbows, and found that the mouth of the womb was so largely opened, as to receive all my fingers up to the middle of the third joint; but I could not stretch it so as to introduce my hand. I then rested, and felt more exactly the position of the child. The breast and neck presented, and the chin was to the right ilium. I then considered, that if I could bring in the face, and keep up the woman's strength, the pains might return, and force them down gradually, dilating the os internum at the same time. For this purpose, I had her changed to the supine position, and introducing the fingers of my left hand, with great difficulty got two of them above the chin into the mouth, and tried to pull it from the side into the middle of the pelvis; but the neck and breast were so engaged in the middle, and the head pressed back on the shoulders, that I could not possibly alter the position. Being now certain

that the child was dead, I introduced a crotchet, covered with the sheath, along the inside of my left-hand, and fixed it, when unsheathed, in the under jaw. Finding, however, that it would tear down the jaw, and not bring in the face, I withdrew the instrument. The funis all this time was a great interruption, by falling down and entangling my fingers. I again gave the woman some respite, especially as she was now growing a little faint, and the flooding, which had abated, was returned.

After she was recruited, I tried again to dilate the os uteri, having found in other cases that it dilated easily when the patients were faint and weak, but found the same difficulty as before. I once more endeavoured to introduce the crotchet at the other side, to come at the shoulder, in order to try if the pulling down of the parts would stretch the os uteri better than pushing up. I was apprehensive of using any greater force by pushing up, lest I should tear the uterus from the vagina; but finding that I could not fix the crotchet to advantage, I again withdrew it. All this time the os uteri felt as if it was two inches thick. The woman being much exhausted, I had her laid in an easier position, and let her lay a considerable time, both to recruit her spirits, and see if the pains would return. In the mean time I sent for Mr. Burnet, who was first called; who being now disengaged, came immediately. He also endeavoured to introduce his hand; but finding it impossible, we all agreed to desist, and to wait, as the flooding was abated; for although she had lost a good deal of blood, yet it had been very gradually discharged.

Our intention was to support her with broths, and nourishing things, and as she inclined to sleep, to indulge her with some repose. Mean while we went to breakfast at a coffee-house, where we proposed to wait the issue of this uncommon case. I resolved, if happily she should recruit after some rest, and recover from the low faintish state in which we left her, to try again in a gentle manner to stretch the os uteri; and if that did not succeed, to dilate it with the scissars, as in the 10th and 16th cases of this collection. In about half an hour, one of the pupils being sent to see how the patient rested, was met by the husband coming in a great hurry, to acquaint us that his wife had fallen into convulsions. Before we reached the house, she had expired; a circumstance which surprized us not a little. I indeed was in hope when we left her, that she would have enjoyed some sleep, which might have recruited her strength, and then the os uteri would probably have yielded, as I had found in the like cases before. I had even in a few cases, known the os uteri tear, and the patient recover.

Rather than let the woman expire without any chance of being delivered, I had determined to dilate the os internum. This experiment, however, I think should never be attempted, but in the last extremity. I reflected after this sudden change, as the flooding was not violent, and the woman at first not so very weak, whether it would not have been better practice to have waited longer for the efforts of nature to open the parts.

This case ought to be a caution to all practitioners, to wait the efforts of nature, and not to use too great violence in stretching the os uteri, especially when the patient is not in absolute danger. On the other hand, if these efforts had not been made till the woman was weak, I should have thought we were too long in assisting; especially as I never met with a case of this kind before, where I did not deliver the patient. The membranes had broken the evening before, and the midwife, by an uncommon feel of the parts that presented, suspected that the fœtus presented wrong. Mr. Burnet, who had the care of the poor of the parish, when called, was not

at home. She was in strong labour most of the night, but had not force to push down the child in that double position to open the os internum. When the first pupil arrived at six, the pains became weaker, and a small flooding had begun. All these circumstances considered, seemed to indicate the practice we followed preferable to delay, especially as we did not expect that the patient would have been carried off in so sudden a manner.

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### C A S E IX.

**T**HIS case happened to one of the poor women, whom all my pupils were allowed to attend. One of them delivered her of one child; and my midwife finding that there was a second presenting wrong, immediately sent for me. The membranes of the second had broken immediately after the first was delivered. Finding the face presented, and having put the patient in a supine posture, I allowed all present to examine the position. Then, as the waters were not all gone, I very easily turned the head up to the fundus, and brought down the legs. I observed, that the child had been dead many days, from the circumstances of the legs being livid, and most of the scarf-skin stripped off. A cloth being wrapped round the legs, I tried to pull down the hips; but could not bring them farther than the brim of the pelvis. I introduced my right-hand betwixt the sacrum and thighs, and found that obstruction proceeded from the abdomen being excessively swelled, and turned to the back part of the uterus. I again pulled the legs with greater force; but began to be afraid they would separate from the body. I introduced the fingers of my left-hand to the swelled abdomen, and along that the scissars with my right, and pushed them into the abdomen of the fœtus, just above its pubes. Withdrawing the scissars, I introduced two fingers into the opening, and pulling there with my fingers, while I grasped the legs with my other hand, tried to bring down the body, but being obliged to increase the force, all on a sudden, and unexpectedly, the hips separated from the body at the loins.

Having now no hold to pull by, I introduced my left-hand into the uterus, and along that the crotchet with my right; fixing this instrument on the ribs, I began to pull; but the hold gave way. I made several attempts in the same manner, fixing the crotchet higher and higher, and in different places; but as often the parts tore down, though the body did not move. I endeavoured to keep it firm with my left hand, while I fixed the crotchet with my right; yet the body was so slippery, that it could not be held firm. My being obliged to bring out my left-hand, as often as the hold gave way, with the crotchet, to guard its hurting the patient or my hand, fatigued me so much, that I was obliged to rest two or three times. At last, tracing up with my hand farther than before, I again introduced the crotchet, and got a firm hold above the shoulder; then bringing my hand lower down, I took hold of the vertebræ of the back. By these holds I brought down the body, and the head followed easily, as the child was not large. I have had some cases of the same kind since, in which the delivery was retarded by the tumefaction of the abdomen; but I pulled at the legs with more caution, for fear of the same accident, and brought down the body with the blunt-hook or crotchet.



## C A S E X.

THE midwife informed me, that she was called about two in the morning, and found the woman in labour, with a small degree of flooding; but that it grew more violent as the pains increased. She signified to the friends that the patient was in great danger; and about eleven in the forenoon I was called; the membranes were broken, and the discharge diminished. In time of a pain I examined, and found the face of the child presented. The os uteri was open about the circumference of half-a-crown; it felt rigid, but very thin. This was her first child, and labour had come on two months before her full time. Her pulse was low and weak; she had fainted several times; but seemed to recruit a little, when told that more assistance was called, and begged earnestly to be relieved. I ordered her to take every now and then a little red wine burnt; and waited to see if the pains would return as she recovered strength. I also prescribed an anodyne and astringent mixture of tinct. rosar.  $\mathfrak{z}\text{iv}$ . Aq. nucis moschat.  $\mathfrak{z}\text{iss}$ . Laud. liq. gr. x. Syr. e mecon.  $\mathfrak{z}\text{ss}$ . two spoonfuls to be taken every half hour.—I was again called about two hours after, and informed, that although she lay quiet, yet she had enjoyed no sleep; and that the faintings had returned. As she seemed to be in imminent danger, I tried, as she lay on her side, to stretch the os uteri, and my efforts seemed to bring on a weak pain; but finding this had no effect, I gradually dilated the os externum, till I could introduce my hand into the vagina, and then began to stretch the os internum with the fingers of my left-hand contracted in a conical form; but although the os uteri was so dilated as to receive my thumb and four fingers, and felt as thin as the edge of a piece of parchment doubled, I could not stretch it wider, even although I proceeded in a slow manner and at intervals. Finding the flooding return, and being afraid she would be lost if not soon delivered, I told her friends this was the only chance she had of being saved. I went to work again, and used greater force than before; but to as little purpose; I could do nothing but cramp and weary the fingers of both hands. While I rested, I began to reflect that I had known some of my patients recover in cases where the uterus tore in stretching, and that some of them had even recovered without any unfavourable symptom following. As this therefore felt so thin and rigid, I found no way could be taken but to make an incision on the os uteri. For this purpose I insinuated two fingers of my left-hand into it, and with my right introduced a pair of scissors betwixt the fingers. With these I endeavoured to snip the part; but finding I could not manage so as to cut through the edge, I pushed one of the points within three or four lines of the edge, and the other on the inside, and snipped through that part which was at the left side, but a little forward, to prevent the laceration that happened afterwards from affecting the bladder, rectum, and large vessels at the side of the uterus. Withdrawing the scissors, I introduced my left-hand, and found the snipped part gradually gave way, so much as to admit my hand, though slowly, and with some difficulty, into the uterus, where I easily turned and delivered the child by the feet. The child, however, was dead. Although there was a pretty large discharge, yet it gradually abated after the placenta was delivered. She continued in a weak faintly condition till the evening, when she fell into little slumbers; but was attacked every now and then with cold and hot fits. I had given her several times a little of the anodyne mixture; also some burnt wine and some chicken-broth to support her, and

and recruit the exhausted fluids. Next day, as the cold shivering returned once in three or four hours, I ordered some extract of the cortex to be dissolved in red wine, and given betwixt the shiverings. The discharge was moderate; but nature being so much exhausted, she died the fourth day.—*Vide* case viii. and xvi. of this collection; also case xxviii. of collect. xxxi. likewise xxxiii. No ii. case ix. and case viii. of collect. xl.

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C A S E XI.

**B** EING called in the evening to a woman near 40, in labour of her first child, the midwife informed me, that she had attended the patient two days; that the pains had been strong since the morning, and after the waters came off; but that the head lay high, and did not advance. I understood by other accounts, that the woman had been put too soon on labour, and was much fatigued. I felt both the os internum and externum largely open, by the midwife having, as she said, worked hard to bring down the child, whose head lay above the brim of the pelvis. The woman being much fatigued with fruitless pains, that were much abated, I had her put to bed, to try if she could enjoy some rest; and desired her not to force down, but when the pains obliged her. As she was costive, her pulse full, and quicker than usual, and her skin hot and dry, she was immediately bled, and procured plentiful passage with a clyster. She enjoyed several refreshing sleeps betwixt the pains till morning, when the pains grew stronger, but still had little effect in advancing the head. The pains again falling off, I was apprehensive, that if I waited longer, the woman might soon be in danger, and not imagining that the child was so large, I thought it was better to try and deliver it by the feet. It required a great force to turn the child, so as to bring down the legs, and even after that, to deliver the body and arms, so that I was obliged to rest several times. I afterward used all the caution imaginable to bring down the head, so as to save the infant; but at last was obliged to increase the force to deliver the woman, and pay less regard to the child. By these last violent efforts, both the under-jaw and neck began to separate. I was obliged to desist, as I found that one of the joints of the neck was entirely separated, and that only about one-half of the skin of it remained untore. I thought it would be easier to fix the crotchet on the head now than when separated from the body; for although the hold at the neck was slender, yet it kept the head steady. I directed an assistant to hold up the body of the child, while I introduced my left-hand along betwixt the right side of the vagina, as the woman lay supine. Then I introduced the crotchet, and delivered the head, though not without a good deal of force, and difficulty in fixing the crotchet, which was the straight kind. Even if I had at this time known the use of the forceps, they would have been of no service in this case; because the head was so large, and so little advanced in the pelvis. The fault was not in waiting longer; for I have had many cases since, where waiting patiently, the head has advanced, and been delivered with the pains, or with the forceps. The pelvis was not narrow.

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C A S E XII.

**T** HIS woman was remarkably tall, and to outward appearance well formed for bearing children; but on enquiry after delivery, I found that she had been sickly and weak for the first four or five years of her infancy.

fancy. I was called to her, when she had been long in labour of her first child, and was obliged to diminish the head before I could deliver. I was called sooner when she was in labour of her second; and although the head presented, I tried to save this child, by bringing it footling. The body passed with difficulty, from the projection of the last vertebra of the loins with the os sacrum. After I had brought down the body; I endeavoured, before the arms came down, to move along the head, first by pressing down the head as she lay in the supine position; then I attempted to bring down the forehead by pushing upward; finding, however, that the forehead rested against the distorted part, I tried with my fingers to press it to the side; but the arms filling up the parts at the sides of the pelvis by the brim, I was obliged to bring down both arms, in order to obtain more room. After having pushed the forehead to the right side, which seemed to be the widest, I introduced my fingers into the mouth, and began as in the former case, to pull in a cautious manner, but finding it did not move downward, I exerted more and more force, till I found the neck giving way, and it was impossible to save the child. I was then obliged to introduce the curved crotchet, which was the first time that I had occasion to use it in such cases since altered from the straight; and found it particularly useful on this occasion; for instead of fixing on the side of the head, it went up to the sagittal suture, which it tore open, and making a large aperture, it had a firm hold on the bones of the forehead; by these means the cerebrum was sooner evacuated, the head collapsed, and was easily delivered. I was called again in her third labour; and as the head presented, proceeded in the delivery with all the precaution mentioned in lingering or laborious cases, till she was almost exhausted; but after all, was at last obliged to deliver as in her first labour. The children were all large. In her fourth pregnancy, she was luckily taken in the seventh month in labour, in consequence of a looseness and super-purgation, occasioned by eating too much fruit. This child, though the head passed with difficulty, was delivered alive; and she has not been pregnant since.—*Vide case penult. of collect. xxxiv. also the former of this.*

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*CASE XIII. and Supplement to CASE I.*

**M**R. H—, of G— Street, was called about two or three in the morning, and found a leg of the child presenting; but when he tried to bring down the body of the child, he found that it was large, and the pelvis narrow. He sent immediately for Mr. W. in Bishopsgate-Street, who brought down the body, but could not deliver the head; neither did they choose to use great force, for fear of separating the body. Besides, Mr. H— did not choose to begin the practice so soon, being a stranger; and Mr. W. was just come off a long journey, very much fatigued. I being called, arrived about eight o'clock, and took two gentlemen along with me. Both Mr. H— and Mr. W. had attended me about eight years before. I was glad when I found there was no flooding, and that the woman was strong, and no way sunk or wore out with the labour. I had her laid across the bed, her breech a little over the side, and two of the gentlemen supported her legs; one of them also supported her body till I introduced my right-hand into the vagina. I found the face lay backward a little to the left side of the pelvis. I felt the lower vertebra of the loins, and upper part of the os sacrum, jut in so much, that it was impossible to deliver the head without diminishing its bulk. As we were certain, from  
the



the umbilical cord, that the child was dead, it was in vain to fatigue the woman and ourselves, by attempting to bring it away entire. I pushed up the ends of my fingers, that were already in the vagina, past the os internum, but with difficulty, it being strongly contracted round the lower part of the head; and by the largeness of the head, and narrowness of the pelvis, they were very much squeezed. I endeavoured to raise the head higher, to make more room, but could not, although I used a good deal of force. Then taking the handle of the crotchet in my left-hand, I introduced it with the point next the child's head; but at first trial could not get it to pass my fingers; I withdrew them to make more room; but the os internum contracted again so close to the head, that I could not get the end of the crotchet to pass. I again tried to force up the head with all my strength, and with great difficulty raised it a little higher; a circumstance which afforded more room, the crotchet passed the os internum, but not without bruising my fingers, and the point slipped a little to one side; this I again turned to the head. As I withdrew my fingers, the point slipped up easier, and I felt it slide along to the crown of the head. I then brought down my right-hand, and taking hold of the handle of the crotchet, used the same precautions as mentioned in case ii: and delivered in the same manner, by fixing the point firmly, and turning the curved part of the crotchet over the forehead. By pulling, the head was opened in the same manner, and delivered, but not without a great deal of force; the external parts of the woman were much swelled, but she was not tore. Mr. H—— called three or four times after, and told me the surface of the labia was grown black and livid; but I heard afterward, that by applying pulices and fomentations; the inflammation went off, and the woman recovered. Mr. H—— informed me, that he believed Mr. W. was not so much fatigued, as afraid of leaving the head behind in the uterus; a case of that kind having happened some time before, in which the patient was lost.

### CASE XIII. or Collection XXX. CASE VI.

*By Mr. John Paisley, Surgeon, in Glasgow.*

**A**UTHORS having differed very much as to the thickness or thinness of the uterus of a woman with child, some, with Mauriceau and Dionis, asserting, that it turns always thinner as it extends; whilst others, I may say almost all anatomists, affirm, that it turns thicker as the woman advances in her pregnancy, and draws nearer to the time of her labour; or to speak more properly, that in the several stages, the thickness of the sides of the womb keep the same proportion to its cavity as in a natural state, the sinuses and vessels being proportionably enlarged as the uterus is extended. I say, this having occasioned some disputes among anatomists, I thought proper to send you the following history of a woman who died in child-labour, where I had an opportunity of examining the thickness of it, and at the same time of discovering a fatal mistake in the midwife who attended her; who, by delaying to call for assistance in due time, was the unhappy occasion of the death both of mother and child.—I was called to a woman in labour, about a middle age, of a low stature, and pretty fat, who had boren several children, and found her in an exceeding low condition, with cold sweats, and severe faintings, her extremities cold, without any pulse, and unable to utter one word, though she shewed some signs of being desirous to speak with me. The midwife that attended her had gone off upon my being sent for, and left a young practitioner whom the

was training up in that business, who gave me the following account of the poor woman's case, viz. That she had been several days in labour; and that all along the midwife imagined affairs were in a very good way, and the child, as she thought, in a very right posture, though after the waters broke, the child's head had never advanced by the strongest pains. Hence the midwife either blamed the mother for not bearing down strong enough when the pains came upon her, or else pretended that the pains were too faint and languid; and as there was no flooding, she never apprehended any danger, and therefore cheered up the mother and friends with the hopes of a good issue by a little patience; and as she had a good deal of other business upon her hands, she frequently left the poor woman for half a day together; and upon her return still found all things in the same situation she left them in. From the first day the woman was taken with her pains she scarce made one drop of water; wherefore on the fifth, the midwife suspecting that to be the cause of the birth being retarded, sent to an apothecary's shop for a strong stimulating diuretic mixture, to increase her pains and provoke urine, being assured all things were right, only the pains were too faint, as no doubt they were, when the woman had been so long fatigued with her labour. This having no effect, a stronger one was called for, which proved likewise unsuccessful; and all things continued in the same state, only that the woman's strength was continually decaying, till the sixth day at midnight, when I was sent for, and found her in the situation above-mentioned. It is evident, that when matters were brought to this pass, the poor woman had not so much strength left her as to bear the fatigue of being put into a posture for being delivered, and that it was impossible to afford her relief. I acquainted the friends with it, assuring them that it would be madness to attempt it in these circumstances, being persuaded she could not live above a quarter of an hour; which accordingly happened, she dying in a few minutes. Next day I prevailed with the friends to have her opened; and after I had cut the teguments, and laid them back, I was surprised to meet with a black membranous body, like coagulated blood (which it in reality was) covering all the fore part of the uterus, though distended so much with the child; this I easily separated in one cake from the uterus; and when it was spread upon the table, it was about a foot and a quarter long, and a foot wide, and a quarter of an inch thick. Whether this proceeded from the ousting out of blood from the substance of the uterus, by the strong pressure when the pains were violent, or from the rupture of some small vessels, either of the uterus, or some other part of the abdomen, I do not determine; for I could not observe the least appearance of any ruptured vessels in either, after the most accurate search I could make; nor was there one drop of blood in any other part of the cavity of the abdomen. I know not if this is a thing that is always observed in such cases, having had no opportunity, before that time or since, to examine any such subject; though no doubt it is a thing may readily happen in very laborious births; and then it is no wonder if violent after-pains, fever, inflammations, and their consequences, follow; for in such a bad habit of body as women in these circumstances are generally allowed to be in, it is scarce supposed that coagulated blood can easily be dissolved and again absorbed by the vessels, in so large a cavity as that of the abdomen; wherefore by its stagnation and putrefaction it may bring on a train of bad symptoms, the cause of which lying entirely out of the physician's power to know, it need be no surprize though he fail in his attempt to remove them; and I do not know but this may be one of the chief

chief causes of those many disorders and frequent deaths that happen after very violent and laborious births ; though there are many other causes well enough known, which are capable of producing such like effects. This phenomenon being what had never occurred to me, either in reading or practice, I thought it would not be unuseful to acquaint the world therewith, to prompt those of greater abilities, or who have more leisure, and more opportunities of meeting with proper objects, to enquire if such a case often happens ; how far the causes hinted at are just, or what other causes may probably be assigned for it ; what sign it may be discovered by ; what method of cure might be proper in such a case ; and the like. When I had removed this coagulated blood, I observed a large sac, or bag, full of water, lying along the sides of the uterus, above the intestines, and reaching as high as the kidney of the right side. Upon feeling it all round with my hands, I found it was loose at its superior part, and appeared to come out from the pubes, where only it had an attachment. This, upon examination, proved to be the urinary bladder, thus distended to a vast bigness, and thrust to one side by the pressure of the uterus on the fore part of the abdomen. I opened it, and measured the urine ; it contained no less than eight English pints, or a Scotch quart. The uterus was pretty closely contracted on the child ; and in opening it from the fundus to the cervix, I found it at least half an inch thick in the thinnest part, though a good deal more at its fundus, where I observed the sinuses so large, as easily to admit the end of my little finger into them. The placenta adhered to the fore part of the fundus. The waters having been broken so long before, I could not expect to find the allantois.

The child had fallen down into the passage much in the natural way, only with its head a little obliquely to one side ; so that part of the frontal and parietal bones of the right side, rested upon the pubes and neck of the bladder ; and by the violence of the pains, these bones had been pushed so strongly against the pubes, as to make a considerable indentation in them, and raised an inflammation for an inch or two round the contused part. I believe I need scarce add, that if assistance had been called in time, the swelling of the bladder might have been prevented, by drawing off the urine with the catheter ; and if the child's head could not be easily stirred, then the child might have been turned and brought away by the feet, as is usual in such cases.

Hence midwives ought to be advised to call for assistance in due time, especially in a case of this nature, where both the mother and child's life are in so great danger, though there be no flooding, since it is one of the most difficult cases that can well happen in midwifery ; and thereby they may save two lives, and secure their own reputation. Hence also, physicians and surgeons may take warning, not to trust too much to the report of midwives, who too often pretend all things are in a fair way, and that there wants only some medicine to promote the pains, which they suppose are too faint and languid, because the head does not fall any lower ; while it may be owing to the above cause, as well as others mentioned by practical writers, when the giving of such medicines may be of the worst consequence.

#### *CASE XIV. and Supplement to CASE V.*

THE membranes had been broken, and the waters were all gone, before I was called. The midwife told me the breech presented. Another gentleman had been called, but he being afraid it would turn out a difficult



labour, left her; upon which I was sent for. When I examined the woman, I at first imagined a leg and a hip presented; but on pulling the supposed leg, which was lying in the vagina, I found it an arm, and very much swelled. It appeared very plain to me, that the midwife had pulled very strongly at the arm, because it was swelled, and the ends of the bones at the shoulder and elbow were stretched to a considerable distance. She had, after her fruitless endeavours to extract the child, doubled up the arm into the vagina. When I told her it was the arm, she said she had felt the fingers lying, as she imagined, with the leg. However, as it was my business to deliver the woman, I said no more. I laid her supinely across the bed; two women supported her legs and thighs; her nates were raised, and brought a little lower. I tried first to introduce my right-hand betwixt the arm and the os sacrum, but could not pass it into the uterus from the bulk of the arm, and the projection of the upper part of the os sacrum with the lower vertebra of the loins: it was the left arm that was down; the left shoulder was pushed in at the brim; the fore parts of the child were toward the belly, and left side to the woman. Finding, after repeated trials, that I could not get up my hand, and that there was more room at the sides of the pelvis, I turned her to her left side. I renewed my endeavours, but the basin being narrow, and the arm of the child so much swelled, I was obliged to desist, and to proceed with caution and by degrees, lest I should lose the strength of my arms, by working too much and too long at a time. I next tried to push up the arm into the uterus; but the contraction of this last was so great, that it was in vain to attempt that method.

As the woman had no flooding, and her pulse was strong, I rested a few minutes; during which I considered, as it was very probable that the child was dead, or would soon die, from the arm being so much swelled and over-strained at the joints; as the meconium, according to the midwife, had for four or five hours been coming down also; and as the pelvis was extremely narrow, it was ten to one that I could not deliver the head without the help of the crotchet. All these circumstances made me think it more advisable to separate the arm at the shoulder from the body. To do this with greater ease, I pulled down the arm with a good deal of force, introduced my hand below it into the vagina, and my finger up to the shoulder; but my fingers were so squeezed betwixt that and the projection of the fore-said bones, that I could not divide it with the scissors; and in my attempts to push up my hand, I found that the fore arm obstructed me most. I then separated this at the elbow. After having rested a minute or two, I again tried to push up the arm and shoulder; the arm I folded up, and the shoulder gave way a little; but by this time my own right arm was a little weakened, and the hand being cramped, and a little bruised on the back part, from the projection of the bones, I again turned her on her back, afterward on her right side, and tried with my left hand, but that was, in a little time, more disabled than the other. Once more I turned her to her left side, and rested about five or six minutes. I now found that a flooding was begun, so that there was no time to be lost. I introduced my right hand into the vagina, but the bones backward still hindered my hand. After turning her a little more toward her belly, I got again the arm folded up to the shoulder, and both raised so high, as to pass my hand up to the fundus uteri. The muscles of the thick part of my arm were so much pressed, that if I had not got one of the feet very readily, I must have withdrawn it again. Grasping the heel and fore part of the foot be-

tween my fore and middle fingers, I brought it into the vagina. I then rested a little, and by degrees fixed a noose upon it. I really thought, in the middle of this last effort, I must have given up this method, and have tried to introduce the crotchet, to fix it on the breast or ribs, and by that means tear down the body of the child into the vagina. The feet being brought down easily by the noose, I introduced my right-hand, and raised the shoulder and head so much, that by pulling the noose with my other hand, on the outside, I brought the breech down to the brim of the pelvis. After another intermission of a few minutes, I took hold of the leg, being the right, with my left-hand, and introduced two fingers of my other to the outside of the left groin; but, after several trials, could not get that hip to advance. Feeling that the blunt point was passed in between the thighs, I wrapped one cloth round the crotchet, and another round the right leg, and pulling both with great force, brought down the body and shoulders without the os externum. The weather was remarkably cold for the season of the year; there was very little fire, and yet I sweated so much, that I was obliged to throw off my waistcoat and wig, and put on my night-gown, with a thin napkin on my head. I then endeavoured to deliver the head, by introducing the fore and middle fingers with my right-hand into the child's mouth, which was to the back part and left side of the pelvis, but could not move it. I now brought down both the arms of the child, and introduced my right-hand into the vagina, and the points of my fingers passed the os internum, along the face of the child, in the mean time, I caused one of the women to hold up the body of the child, to give me more room to work. I introduced a curved crotchet, which had a thick wooden handle, with my left-hand, the point to the child's face, and up along to the crown of the head. It fixed upon the head; but finding the point a little on one side, I moved it into the middle, by turning the point, and keeping the handle back to the perinæum and the upper end, in an imaginary line, to the middle space betwixt the navel and the scrobiculus cordis of the woman. When this was done, I brought down my right-hand, and with it took hold of the crotchet; I laid the body of the child on my right arm; I placed two fingers of my left-hand on each side of the child's neck, and over the shoulders, and began to pull with both hands, slowly at first, till I found that the point of the crotchet had a firm hold in the head. I increased the force of pulling the crotchet, and found that it came down about two or three inches without moving the head. Apprehensive that the point had not entered the skull, but only tore down the hairy scalp, I raised it up to the former place, and renewed my effort. It came down as before, but held fast above the forehead; I then rested, and afterward began to pull both the crotchet and body of the child with greater force. I found some of the cerebrum coming out, and the head moving a little lower. I continued to rest and pull by turns, until the head lessened, and was squeezed by degrees into a smaller bulk. After it had passed through the narrow part of the brim, it was delivered with great ease. The placenta being already loosened from the uterus, was immediately forced into the vagina. I took hold of the umbilical cord with one hand, and the edge of the placenta with the fingers of the other, by which means it was soon extracted. The uterus soon contracted into a small bulk. I examined with my fingers the perinæum, and found that it was not the least cracked or tore. The woman bore all these endeavours with great courage; her pulse continued good and strong; the discharge of blood

was

was not great, and did rather service, for the parts were lubricated and relaxed by it.

When I examined the child, I found the curvature of the crotchet had allowed the point to go over the forehead, too near the turn of the hair at the crown, and it had tore open all the sagittal suture through the fontanelle, and fixed on the thick part of the skull at the forehead, which a straight crotchet could not so easily have done. The opening was about three inches long, and about a third or fourth part of the brain was evacuated. I ordered the woman to be kept quiet, and to drink frequently of warm caudle. I called two days after, and found her pulse strong, quick, and hard, with pains in her back, belly, and head, and a difficulty in breathing; she had got but little rest, and had sweated none: she told me that neither she, nor any of her sisters, could sweat or bear sweating: the discharges had gone on very well, but were abated more than usual that day. I advised that she should immediately lose twelve ounces of blood from her arm, and drink plentifully of barley-water, or water-gruel. The nurse had given her very little drink. She was soon relieved, and recovered much better than I expected. She was a little woman; and as I could judge by the difficulty of my hand passing, it was not above three inches and a half or three-quarters, from the upper part of the os sacrum to the pubes. If I had not rested a great many times, and proceeded with caution and deliberation, I should have failed in turning the child; and if I had pulled with too great violence at the body, I should have separated it from the head, which it was very difficult to open and extract in so narrow a pelvis.

#### CASE XV. and Supplement to CASE V.

*In a letter from Mr. Mudge, of Plymouth.*

HE was sent for to a woman who had been in labour all night, and the membranes were broken about eight hours. Her pulse was tolerably strong, though very quick, and her countenance very florid; circumstances owing to her drinking plentifully of spirituous liquors. On examining, he found most part of the left arm hanging out of the passage, together with the cord, which was cold, flabby, and without the least pulsation. The head (as he imagined) was sunk down considerably, insomuch that he thought nature might be sufficient to push it forward. He therefore left her, and prescribed some medicines to amuse. He called about eleven, and found no alteration, except that the pulse was so much sunk that he determined to deliver. Having introduced his hand, and moved it round what he thought the head, which felt loose, and exactly filled up the pelvis, he fixed the forceps with as much advantage and ease as he had done in former cases; but the instrument slipping two or three times, he desisted, and tried to turn and bring the child by the feet. However, the passage being filled up he was obliged to twist and pull off the arm from the shoulder. He then, with great difficulty, pushed his hand into the uterus, and found that it was the upper and back part of the shoulder, as far as the spine, which had been pushed down, exactly moulded to the shape of the pelvis. This he all along had taken for the head, which was now found lying above the right side of the pubes, the feet being at the very fundus uteri. With great difficulty he brought down the right leg; and by pulling at it, and pushing up the shoulder at the same time, he soon extracted the child. The labour rested about twelve minutes, and



the child was quite rotten. The remainder of the case carried to collection xliii. N<sup>o</sup> 1. case 2.

*C A S E XVI. and Supplement to C A S E X.*

**T**HE woman was in labour of her first child, eight months gone, and the child's arm presented. She was attacked with a flooding; and had been in labour several hours. The membranes were broken, the hæmorrhage was a little abated; and the arm pushed down into the vagina. The os internum was open about one inch and a half, or the circumference of a half crown, and felt no thicker at the edge than a piece of thick parchment. Having caused her to be laid in a supine position, I by degrees introduced my hand into the vagina; and afterwards my fingers into the os internum. Thus I endeavoured gently to stretch, by pushing up my fingers in form of a cone; but to my surprise, found it so rigid, that it would not dilate in the least. I then used greater force, and repeated it several times, by using one hand till it was fatigued and cramped, and then the other; but all to no purpose. Having failed in all these attempts, and recollecting from former experience of a few cases, that by such force the os internum had been tore, and the woman recovered even when the os internum was much thicker, I thought it advisable to introduce the scissars, and snip the edge of it. This operation being performed, it gave way so as to allow my hand to pass into the uterus. I then turned the child, and delivered it by the feet, which were much mortified, the child having been dead at least a fortnight. The woman seemed in a way of recovery; but complained of pain and soreness. About the fourth day she was taken with violent pains in the head and a quick pulse; but bleeding in the arm relieved her: on the fifth day after venesection, she was seized on a sudden with a violent looseness, which weakened her much; but it was restrained by anodyne and cordial medicines: the fever recurred, and she was again bled on the sixth: but the looseness returned on the seventh; which sunk her so that she immediately expired. This was the second time that I had snipped the os internum when I could not stretch it, supposing that as it was so thin the dilatation could have no bad effect. Although I did not succeed in collect. xxxv. case x. I attributed the death of the patient in that case to her great weakness, from her being exhausted before delivery by the hæmorrhage; but I hoped, as this woman was stronger, the same method would have succeeded; especially as the child must in this case be brought footling. I say, I had found it tear considerably, and the woman recover; but I afterwards reflected, that as the patient had not flooded much, I ought to have waited longer to allow the pains to push down the shoulders, and dilate the parts no more. No doubt the violent force used first to dilate, and then the farther dilatation when I introduced my hand, might bring on the inflammation, pain, and fever, which ended in a looseness. It is among the most difficult things in midwifery to know in floodings, especially if the child presents wrong, when there are labour-pains, how long to delay the delivery: because if we deliver soon, and the woman dies, we are ready to reflect that it would have been safer to leave it to the labour to stretch the parts; and when we delay too long, and the woman is too much weakened with the flooding, we are apt to think it would have been safer to have delivered sooner.

We find in cases where the child presents fair, that the flooding commonly diminishes, or stops, on the breaking of the membranes in labour,

and

and then the head is forced down, and the woman is for the most part safely delivered; but here the wrong position prevents the delivery; and although the violence of the flooding is abated on the waters coming off, yet as there is a draining, this being long continued sinks the patient. This fatal case is inserted as another caution to young practitioners. *Vide* case viii. of this collection. *Vide* also collect. xxxi. case xxviii. and collect. xl case viii. likewise collect. xxxiii. N<sup>o</sup> ii. case ix.

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*CASE XVII. and Supplement to CASE V.*

*In a letter from Mr. Mudge, Plymouth.*

**H**E was called to a very little woman much deformed. She had been in labour two days; the waters had been discharged seven hours; her pulse was extremely low, and sunk, occasioned by a pretty large flooding. He found the right arm in the vagina, together with the cord; the pulsation of which assured him of the child being alive. He, after great fatigue, brought down the legs and body. Then he tried to deliver the head, at first with great caution, to save the child; but the pelvis being so very narrow, that the head was as immoveable as a rock, he increased the force, and underwent a greater fatigue than he could describe. He endeavoured to introduce the crotchet, and fix it on the upper part of the head; but his strength being so much exhausted, and the pelvis so narrow, he could not raise it high enough; but fixed it on the under jaw, and finished the delivery by means of his utmost force. The labour lasted about twenty-five minutes. The mother was perfectly well in a week.

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*CASE XVIII. and Supplement to CASE IX.*

**T**HE woman had been in labour several hours before the membranes broke. Mrs. Moore, now Simpson, whom I had taught, and kept on purpose to attend all the labours with the pupils in the teaching way (in Derwick-Street) was first called. She had assembled about ten of the gentlemen. Before the membranes broke, they could scarce feel any part of the child. Being called, I examined, and could feel some part of the child resting above the os pubis; but could not distinguish it to be the head. When the membranes broke, it came a little lower; but as it felt unequal, and not like the round and hard touch of the head, and still kept high, although she had strong pains, I thought it was more advisable not to wait any longer, especially as the woman herself told me, that in her former labour, which was her first, a gentleman was called, and was obliged to bring the child away piece-meal. I then had her brought to the foot of the bed, as there was more room than at the sides; two of the pupils supported her legs. I kneeled, and at every pain introduced my right-hand in form of a cone, by little and little, into the vagina. I then found it was the face and neck, with the chin to the left side of the pelvis; I also perceived the bones projecting inward, where the lower vertebra of the loins join the os sacrum, and forming an acute angle, which was the occasion of the head not coming down lower; but although I found the pelvis narrow, yet the head felt but small; and as it was too high for the forceps, there was a probability of saving the child by turning it, and bringing it footling. The face filled the upper part of the pelvis so exactly, that some of the waters were still kept up in the uterus; so that when I pushed up the head, it was with great ease raised to the fundus uteri. By pushing it

up quickly, the thick part of my arm filled the os externum and vagina; so that the remaining waters were kept up, till I got the child turned with the breech and legs to the lower part. These I easily delivered, and expected also to have safely extracted the head, although the pelvis was narrow. I brought the chin a little to the left side; introduced two of the fingers of my right-hand into the mouth of the child, and with my left held the body. I began at first to pull with a small force; but as the head did not advance, was obliged to increase it more and more; though to no purpose. I rested and pulled again with all my strength, till the fingers of my right-hand began to fail; then I changed hands, but without effect. I rested and changed hands again, and continued to pull till I found the neck and jaw begin to give way. As it was now to no purpose to try any longer, because the child could not be brought alive, I extracted it with the crotchet in the same manner as described in the two last cases. The fore and middle fingers of my right-hand were so over-strained by the great force of pulling in the mouth, that they swelled at the joints next to the back of my hand for several days, so that I could scarcely move them. Next day the joints at my elbows and shoulders were swelled also. The woman recovered.

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*CASE IX. and Supplement to CASE XI. and Collect. xxxiii. No. i. Case iv.*

THE woman had been beaten and kicked on the private parts three weeks before, so as to occasion a large swelling on the labia pudendi. She had not felt the child stir for fourteen or sixteen days. Some of the gentlemen that attended me, had been called two or three times some days before the delivery; but found it was not right labour. She was bled and a pultice applied to the swelling, which relieved her, so that it was quite gone before she fell in labour. She was weak and low, having eaten or drank little since the time she had received the bruises on her body, which had rendered her incapable of begging about the streets as formerly. When I examined, I found the os internum pretty much dilated; the membranes felt very thick. She had been several hours in labour, but as she was weak, the pains did not force them down into the vagina. She was very big. I felt with difficulty the child's head, which lay above and over the os pubis, and below that a great quantity of waters. I waited from ten or eleven till seven in the evening; but there was not the least alteration in the parts. As the woman was weak, and I suspected that the child was dead, from the head being kept up so high, occasioned by the belly being very much swelled, and expanded with air, which made it specifically lighter than the waters, I resolved to try to deliver her, especially as she had formerly two children, and according to her account the labours were not lingering; but suspecting there might be difficulty, I waited till all the gentlemen that attended me were convened. I had the woman laid supine across the bed, her legs supported by the two eldest pupils. At first I designed to have broken the membranes, that the head might be forced down when the waters were evacuated, and the uterus contracted; but finding the membranes high up, and rigid, and that the os externum dilated with a small force, I altered my design, and introducing my right-hand into the vagina, passed it up through the os internum into the uterus. Having broken the membranes, I passed my hand within them, and found the child floating in a large quantity of waters, which were kept up by my arm locking up the os externum. I then felt, and told the gentlemen that the belly of the fœtus was largely swelled, and that I was then turning up the head to the fundus,



and bringing down the breech and legs to the lower part of the uterus; at the same time placing the face and fore parts of the child toward the back of the mother. When I brought down the feet of the child, the waters contained in the uterus issued out with great force along my arm, to the quantity of three or four quarts. I then brought the legs without the os externum, and the scarf-skin stripped all off. After wrapping a cloth round them, I endeavoured to bring along the thighs and breech; but could not move them farther. I pulled with greater force, but found the legs were like to separate from the thighs. I then introduced the fingers of my left-hand along the back part of the pelvis, and found the bigness of the belly was the principal obstacle. With my right I introduced the scissors, and pierced it with the points, on which a good deal of rarefied air and waters were discharged. After dilating the points to enlarge the opening, I brought them down, and introduced the fingers of my left-hand into the aperture; with these I got a firm hold over the os pubis of the foetus, and within the abdomen. By pulling at this, and with my right-hand at the legs, the breech was brought without the externum; but then I found it was separating at the vertebra of the loins from the body of the child. I then rested a minute or two, and introduced the fingers of my left-hand up to the breast of the child. With my right I passed up the point of the crotchet, and fixing it there, tore open the breast and ribs; but in pulling at the crotchet with my right, and at the breech with my left, the last was pulled from the upper part of the body. I found on tearing open the breast, that a large quantity of water and blood were evacuated. The hold of the crotchet giving way, I tried to fix it higher; but every part tore so easy, that I could not bring down the body. I then was obliged to take out the crotchet and rest a little, for my hands and arms began to be cramped and enervated. After recovering a little from the fatigue, I introduced my right-hand into the uterus, and tracing up to the shoulders, brought down one of the arms. I attempted to fix a noose over the wrist, but it was so slippery, and the body so high, that I could not get within the os externum. I again introduced my hand, and was for a little while at a loss how to proceed to deliver the body and head to the best advantage; because every part tore so soon where I fixed the crotchet. Without bringing down the body, I tried to push it up and bring in the head; but this last was so large and slippery, that I could not turn it down so as to get the hind or upper part to present. Being again fatigued by these fruitless endeavours, I was obliged to intermit. I then resolved to fix the crotchet; for which end I introduced my left-hand up to the shoulders, and with my right got the point fixed so firm above one of them and the clavicle, that it did not give way, but brought it down into the pelvis, and without the os externum. I pulled slowly and with caution, lest a separation should happen at the neck, and then it would have been more difficult to deliver the head. After I had got the shoulders without the os externum, I again rested that my strength should not be too much exhausted. I introduced two of the fingers of my right-hand into the child's mouth, which was a little to the left side of the os sacrum, and above the brim of the pelvis, and with my left-hand I pulled at the shoulders, which were wrapped in a cloth. Finding the head did not move, and that both the under jaw and neck were giving way, I again desisted. I now introduced the fingers of my right-hand up to the face and forehead, and with my left passed the crotchet up betwixt them, till I could find the point above the crown of the head. Having brought down my right, I then took hold of the handle of the crotchet

with

with it, and the shoulders with my left. I tried several times if the crotchet had a firm hold, and gradually increased the force of pulling; by which means I brought the head down into the pelvis, and luckily delivered it; the crotchet had fixed near to the crown of the head, and had tore open the skull, from that part through the fontanelle to the bones of the forehead. At this large opening, the brain was squeezed out, the head collapsed, and came down with greater ease. I was afterwards obliged, with a great deal of trouble, to separate the placenta, which adhered firmly to the fore part of the uterus; but could not effect the separation till I turned her on her left side. One thing was remarkable, and assisted me much, at least it prevented a greater fatigue. Every time I introduced my hand into the uterus, I found it still kept from contracting on the child, by some waters that remained; for although a vast quantity came off at first, yet when I brought down my hand, the parts of the child pressed so close down, that there were still some detained. My greatest fatigue was occasioned by my being obliged so often to pull down and push up my hands, as well as by the slipping of the body and crotchet. If I had taken the first method I designed to follow, the difficulty, I believe, would have been much the same; for as the woman was weak, the pains would not have forced the head into the pelvis, even after the membranes were broken, and the bulk of the waters evacuated. Besides, as the head was large, and the hairy scalp swelled, the forceps could not have brought it down. The only advantage would have been after the head was opened, and extracted with the crotchet, that the shoulders could have been easier tore down with the instrument, than the belly, opened in the same manner; after which there would have been no danger, as in the other way, of leaving the head behind.—*Vide collect. xxxiii. No. i. case iv.*

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*CASE XX. and Supplement to CASE XII.*

A WOMAN near her full time, of her second child, was taken with a discharge of blood from the uterus, which continued to drain for eight or ten days. She was by misfortunes reduced to low circumstances, and had suckled her first child till within three weeks of this labour. It then died; and her grief, joined to the shock of a sudden surprize soon after, was perhaps the occasion of bringing on the flooding. When called to her, I found her pulse low and weak, though not frequent. She had no labour-pains, but had been attacked with frequent vomitings, which had helped to dilate the os uteri. On examining, I found the head of the child presenting with the membranes and waters; the os uteri soft and pretty much dilated. As she had lost a great quantity of blood, and there was no prospect of right labour-pains, I thought it safer for the woman and child, to deliver directly by turning, and bringing by the feet, especially after she had told me, that she had been delivered easily of the first child. I had little difficulty of introducing my hand into the uterus, and as the membranes had not been broken, I easily pushed up the head, and brought along the legs and body. After I had turned the belly of the child to the mother's back, and a quarter more, I then brought down the legs, body, shoulders, and arms. I now introduced a finger into the mouth, and expected, as she had an easy labour before, to have delivered the head with very little difficulty; having tried every safe method, first to bring the forehead into the hollow of the os sacrum, by pulling the body both upward and downward, and likewise from side to side; then endeavoured to move the face

first to one side, then to the other; all my efforts proved ineffectual. I exerted greater force, and continued to increase it till I found the neck and mouth begin to give way; I then declared that I could not possibly save the child. I introduced my left-hand along the side of the child's head, until my fingers passed the os uteri, along which I introduced a curved crotchet, with its point bearing close along the head to the upper part, and moved it backward to bring the convex part over the forehead. This being done, I fixed the point into the upper part above the forehead, then pulled slowly to find if it had a sufficient hold. When I was certain of this, I pulled with greater force, and found the bones of the skull collapsing, and a quantity of waters come along; the forehead came easily down into the hollow of the os sacrum, and was delivered immediately without tearing the parts of the woman. The uterus contracted so strongly, that the placenta, with very little pulling at the funis, was pushed down into the vagina, and easily delivered. The flooding ceased immediately, and the woman bore the operation better than I expected.

The child's head was about a third larger than common, and it was remarkable, that the fontanelle and sutures were no otherwise than in a found head, the first no larger, and all the bones were close to one another: in general, when the head is dropical, the bones are stretched from one another more or less, according to the quantity contained. Dr. Brisban examined the head next day, and poured through a funnel no less than a quart or three pints of water, at the opening which had been made with the crotchet into the head; the whole cerebrum and cerebellum were found. The point of the crotchet was fixed at the side of the fontanelle, which it had perforated. This aperture allowed the waters to discharge, the head to lessen and come along. The woman seemed to be in a good way for several days; during which the doctor attended her, and prescribed some medicines to help her to rest and sweat; but she being mismanaged, and neglected by her nurse, was thrown into a fever, and died about the 18th or 20th day.

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#### CASE XXI. and Supplement to CASE XII.

*In a letter from Mr. A—, of B—.*

**H**E was called to a woman, who had been in a lingering labour three or four days. Although she had now and then fainting fits, yet her pulse was regular and strong; the head presented fair, but very high; which made him resolve to turn the child, and bring it by the feet: this required great force; and after the body and arms were delivered, he was obliged at last to exert great force in extracting the head with the crotchet. He says, he abundantly repented the attempting to turn and deliver footling, and wished he had waited longer, as the woman did not seem to be in such danger as to require an immediate delivery. He reflected, that by waiting, perhaps he might have succeeded with the forceps; and if they had failed, and the woman been in danger, it would have been safer for her, especially as the child was large, and the pelvis narrow, to have diminished the bulk of the head, rather than run the risk of her life, by so great force being used; for although she did recover, it was with great difficulty, and what he did not expect.



## C A S E XXII.

THE same gentleman had a case similar to the preceding, wherein the woman had been in labour all the day before, and the waters had come off several hours before he was called. The head rested over the os pubis, and the pains were almost entirely gone off. Having laid her on her side, and raised her hip higher than her shoulders, he easily introduced his hand into the uterus, and brought down the legs and body of the child; but after many repeated trials, and exerting great force, he could not deliver the head. Thus foiled, he was obliged to introduce the crotchet, which he fixed on the left parietal bone, near the sagittal suture; and at last, not without some difficulty, delivered the head. The child was very large, and the pelvis narrow, from the projection of the upper part of the sacrum, and the make of the bones at the symphysis of the os pubis. The placenta adhered to the fore part of the uterus. The woman recovered very well.

He writes, that perhaps I would censure him for conducting the operation after this manner, when he knew what sort of pelvis he had to deal with; as he could not tell but that the head was not only large, but also too much ossified, to yield to the passage. He was in hopes, by the cautions which he used, to deliver without the application of the crotchet, especially as he found he could turn the child with so great ease.—*Vide collect. xxxiv. No. ii. Case xvii.*

## C A S E XXIII.

THE same gentleman writes a third time, that he was sent for to a woman about midnight. The midwife acquainted him, that after the waters broke, though the pains were strong and forcing, the head did not advance, but rested on the os pubis; that she often endeavoured to disengage it, but to no purpose; she therefore tried to turn it, but failed in the attempt, and had brought down a hand, which, with the head, was firmly locked in the passage. Upon examination, he found the child situated as above, and the pelvis very narrow, from the jutting in of the last lumbar vertebra, and the upper part of the sacrum. Having properly placed her, he endeavoured to raise the head, but could not make it yield in the least; then he attempted to slip his hand on one side; for though it was closely jammed between the os pubis and sacrum, there was room on each side of the pelvis; but neither could he succeed in this endeavour. He now caused the patient to be turned on her knees and elbows, and with much difficulty introduced his hand, but was several times obliged to withdraw it for ease, the great pressure cramping him so as to render him incapable of reaching the feet. In this situation he hardly knew how to act. The head was not only very high up, but did not present fair enough for the crotchet; and the contraction was so strong, he almost despaired of bringing down the feet. However, as he thought this the most probable way of relieving the patient, he once more attempted it; and after much difficulty, so far succeeded as to bring down one foot, and fix the noose on it. He then brought down the other, and joining them together, extracted as far as to the chest, and reached the left arm; the right being engaged with the head, gave him some trouble, and he snapped the humerus in extracting it; but this gave him less concern, as there was no pulsation in the funis. The arms being down, a principal difficulty (the head) still remained. He introduced a finger into the mouth, and had very near dislocated the neck; it was so fast locked, that he could gain no ground. He therefore insinuated a crotchet,

by

by which he delivered it in a short time. He left the poor woman without any hopes of her recovery. She indeed recruited a little about six or eight hours after, but died that day or the following.

*The two first cases from Mr. A—— were both badly conducted, and inserted as a caution to others to wait with more patience.*

#### C A S E XXIV. (*A preternatural one.*)

*From Mr. C. Chorley, of Sanky, Lancashire.*

I WAS sent for to Ashton, near Wigan, by a surgeon, to Anne Marsh, called the *Little Dwarf*, about one yard nine inches in height, aged 39 years. The midwife told me she had been four days in labour of her first child; that the leg had been without the birth twelve hours, and the patient had now no pains. I found the heel toward the pubes, and the scrotum hanging out much swelled. After using great force, I raised the body of the child, which gave me more room to introduce my finger betwixt the thigh that was still up and the body. I at last, by taking time, and using all my strength, got the body delivered as far as the shoulders. Perceiving the cartilages of the sternum driven inward by the jutting forward of the vertebrae of the mother's loins, I brought down the arm. I made an incision with the scissars at the back part of the child's neck, to introduce the curved crotchet within the foramen magnum, but to no purpose; after this, I made another opening on the right side of the neck, separating the skin with my finger, higher up than the ear, which formed a safe canula to receive the point of the crotchet, and defend the mother from being injured. Introducing the crotchet, I tore open the skull, and as the head lessened, I delivered the same. The woman recovered very well.

### COLLECTION XXXVI.

*Cases in which the head was left either in the vagina or uterus, and where the body was delivered and separated from the same.*

[Vide Part i. Book iii. Chap. iv. Sect. v. Np. ii. and Tab. xxxvi.]

#### C A S E I.

A MIDWIFE, who never had any education, and who had formerly boasted that she always did her own work, and would never call in man to her assistance, was called to a case in which the child presented wrong. After she had, with great difficulty, brought down the body, she could not deliver the head, from the woman being of a small size, and the child large. During the time of her making these trials, the husband sent in great haste for me. In the mean time, when the midwife found her endeavours were in vain, she rested, to recover from her fatigue, and told those who were present, that she would not wait for the assistance of the woman's pains. One of the servants seeing me at a distance, went in a hurry, and told her I was come. She not knowing that I was called, fell to work immediately, and pulled at the child with great force and violence. Finding, as she imagined, the child coming along, she called out, that now she had got the better of him. The neck at that instant separating, the

body

body was pulled from the head, and she fell down on the floor. As she attempted to rise, one of the assistants told her that it wanted the head, a circumstance that shocked her so much (being a woman of a violent disposition) that she was immediately seized with faintings and convulsions, and obliged to be put to bed in another room. I just then arrived, and was surprised to find the house in such confusion.

After being informed of what had happened, I found that the woman's pulse was pretty good, and that there had been no discharge of blood from the uterus, but what came now was only from the child's head; which, to my great joy, I found lying in the vagina and pelvis. I let her lie a little, to recover of the former fatigue, then examining more particularly, I found part of the skin of the neck without the os externum. After I had put her in a supine position, I introduced the fingers of my left-hand, and found the mouth at the right side, and lower part of the sacrum. Introducing two of my fingers into it, I tried with that hold to bring along the head; but finding that this would not be sufficient, and being afraid that the under-jaw would separate if I used greater force, I pushed up my fingers farther, and along the face, and with my right-hand introduced the crotchet to the upper part of the forehead. Here I fixed it, and again taking the former hold in the mouth with my fingers, by pulling with them and the crotchet, I delivered the head much easier than I expected. After having extracted the placenta, and put the woman into an easier position in bed, I went and recovered the midwife, by giving her some volatile spirits in water. The child appeared to have been dead several days, and I was persuaded, that if the neck had not given way, but had stood another pull, the head had been delivered.

This accident was lucky for me, and rendered the midwife more tractable for the future.

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### C A S E II.

THE breech of the child presented, with the thighs to the pubes, and the body was forced down with the labour-pains; but the midwife not knowing how to turn the fore parts of the child to the back parts of the uterus, brought it along as it presented. The child being pretty large, she used a good deal of force to deliver the head, which not being sufficient, she fixed a cloth over the shoulders, and got one of the by-standers to assist her, by pulling with greater force; by which the body was separated from the head. In consequence of this accident, I was immediately called. I found the greatest part of the head still above the pelvis. The midwife told me she was in hopes that the woman's pains would have delivered it before I came; but that now they had quite left her, and that a flooding was begun. The woman's pulse was a little sunk. I examined the body, and found that the child had been dead at least ten or twelve days; the scarf-skin was livid, and some of it slipped off; and the woman had not felt it move or stir during that time. After encouraging her, and giving her some warm wine and water, and putting her in a supine position, I introduced my right-hand into the vagina, and raised the head above the brim of the pelvis; then turned it, and brought in the upper part of it to present with the face backward, and a little to the left side. This being effected, I ordered an assistant to press on the belly with both hands, to keep down the uterus and head in that position; then opening the head with the scissars, I went up along the forehead and face, introduced the blunt-hook with my other hand, and fixed the point in the mouth, which

was



was now turned toward the fundus. I now withdrew my right-hand, took hold of the blunt crotchet or hook, and introduced the fingers of my left-hand into the opening. With these two holds I gradually brought down the head, and delivered it slowly, though with some difficulty. The placenta, which was partly separated, followed soon after. The head, in this operation, slipped several times before I got it right turned, to present with the upper part. I also had some difficulty in keeping the head steady so as to perforate the same with the scissars; by which both my hands were pretty much cramped and wearied.

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### C A S E III.

THE head was separated much in the same manner as in the foregoing case, but the face was to the right side. The head was kept high up, from the pelvis being narrow, and the body was easier separated, from being much mortified. I was not sent for to this woman till 24 hours after the separation, the midwife assuring them that the pains would be sufficient to deliver the head; but the woman growing weaker, and there being a small discharge of blood, which now began to increase, I was sent for. As the external parts were pretty much swelled, I with difficulty introduced my hand into the vagina, and pushing up the head, turned down the upper part, as in the former case; but the task was rendered much harder, from the narrowness of the pelvis, and the placenta lying loose at the back of the uterus; this I was obliged to bring down before I could place the head in the right position. After I had opened the head, I could not fix the blunt-hook, as in the former case; but got a pretty firm hold at the fore part of the ear; and luckily the head not being very large, I brought it gradually lower, as the cerebrum evacuated, and at last delivered it. The point of the crotchet slipped twice in pulling; but the third time I got a good hold in the outward corner of the left orbit of the eye.

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### C A S E IV.

THE arm of the fœtus presented. The midwife sent for a gentleman in the neighbourhood, who practised midwifery. He was so fatigued by the time he got the child turned, and the body delivered, that he was not able to extract the head. In this situation he called Mr. Steed, of Guy's hospital, who tried several times to deliver the head in the manner described in collect. xxxi. He afterwards endeavoured to introduce the curved crotchet, and to fix it on the upper part of the child's head, but was prevented by the narrowness of the pelvis, which cramped and fatigued his hand so, that he was not able to fix it. After the other gentleman and he had tried this last method several times, and found the head lie so very high, that the shoulders prevented their going up sufficiently with their hands to guide the instrument, they at last resolved to separate the body from the head; an operation which one of the gentlemen performed with an incision knife, at the lower part of the neck, between the sixth and seventh vertebra. Again they attempted to fix the crotchet; when this did not succeed, they tried to push up the head, so as to turn down the vertex, and open it with the scissars, and then to extract with the crotchet, as in the former cases: but being both fatigued, they were obliged to desist, and sent for me; and, in the mean time, desired the woman might be kept quiet in bed. After having placed her in a supine position

tion, I introduced my left hand into the vagina, then raised the head, so as to gain admission into the uterus. In doing this, I found that the difficulty in the head coming along proceeded from the pelvis being distorted; and that the upper part of the os sacrum and last vertebra of the loins jutted considerably forward. Having found the mouth, I introduced a finger into it, and bringing it downward, turned the forehead to the right side, at the brim of the pelvis; then tracing up with my fingers along the face and forehead of the child, while an assistant pressed gently with both hands on the abdomen of the woman, I tried to introduce one of the curved crotchets; but the pubes preventing me from insinuating it far enough up in this position, I turned her to her left side, and introduced my left-hand in the same manner. Betwixt this and the child's head, I slipped up the crotchet with my right-hand, having the head grasped in the uterus with my left, my fore and middle fingers being placed on the right parietal bone near the vertex. I then fixed the point of my crotchet into this part; and after I found that I had tore open the skull, and that the crotchet had a firm hold, I withdrew my hand. Fixing again the fore and middle fingers into the mouth, and my thumb below the chin, I began to pull with both hands, viz. at the under jaw with my left, and at the crotchet with my right; but finding that it required a great deal of force, I pulled at first in a slow and cautious manner, that as the crotchet tore open the bones, I might allow time for the brain to evacuate, and the head to diminish in its bulk. I exerted the greatest force at the crotchet, and only a little at the under jaw, for fear of tearing it off, and losing that hold, which is of great advantage to keep the head steady. By increasing the force at intervals, the head began to advance lower and lower. When I had brought it down into the pelvis, I directed the assistants to lay the patient in the supine position; then I turned the forehead from the right ischium backward to the concave and lower part of the sacrum; and standing up, pulled the head upward, in a semicircular manner, from below the pubes. One lucky circumstance attended this case; the woman had no flooding during the whole time, and endured all these efforts with great resolution. Finding that the placenta did not in a little time come down, I introduced my hand into the uterus, and found the part where the head was lodged still pretty open. At the upper part of it I perceived the middle of the uterus, contracted in form of an hour-glass, below the placenta, which adhered to the fundus. I insinuated the fingers of my right-hand gradually into this contracted part, while at the same time I pressed my left-hand on the abdomen, to keep down the uterus. After it was fully stretched, so as to allow my hand to pass, I gradually separated and extracted the placenta, which was adhering firmly to the uterus. When we examined the head, we found the crotchet had fixed on the right bregma, and had made an opening about two inches long, down toward the temple. In operating, I tried to fix it nearer the vertex, on the sagittal suture; but the head being slippery, and difficult to keep in a firm position, I was glad to fix it in that part. Indeed I imagined it was fixed higher, and the opening much larger, till the head was examined. The woman, although she was much exhausted by undergoing the fatigue of these several trials, yet at last recovered much sooner and better than expectation. When I was called (as such cases happen but very seldom) I carried along with me a pair of the long forceps, bent to one side, Amand's net, Leveret's tire-tête, and a pair of curved crotchets. But finding the difficulty proceeded from a narrow pelvis, and that the head must first be opened, and lessened in bulk, before it could pass, the curved

crotchets seemed the most simple and effectual instrument. If this had failed, then it might have been proper to turn down, and open the vertex with the scissars, and extract the head with the crotchets. The curved kind seem better adapted for this purpose than either the straight kind or blunt-hook, to be used either with or without the sheath. Dr. Hunter was present, and assisted at this operation. (*Vide my Anatomical Figure, table xxxvi. which was drawn to illustrate this case.*) This should be a caution to practitioners, never to separate the body from the head, if possible to deliver without using that expedient; but to wait with patience (when the child cannot be saved) the efforts of the pains, especially if the woman is not in absolute danger; for the head is much easier delivered with the crotchet, when not separated from the body.

### C A S E V.

*In a letter from Mr. A—, of E—.*

**A**NOTHER practitioner was called by a midwife, to a woman of a delicate and tender constitution. She had been a whole day in strong labour before the membranes broke; the pains after that abated, and in two days the head did not advance. He found the os uteri fully open, and the forehead of the child toward the pubes. With great difficulty he turned the child, and brought down the legs and body; but in using all his force to deliver the head, both the jaw and neck gave way. Being much fatigued, and the uterus strongly contracted, he could not introduce his fingers to the head, so as to fix the crotchet. Having sent for my correspondent, he, after repeated trials, at last got his fingers into the orbit, where he fixed the crotchet, and delivered the head, which was large. The sutures were firm, and the pelvis was narrow. The patient seemed to be in a fair way of recovery for the next two days; but imprudently sitting up too long, and drinking heating liquors, she fevered, and died the sixth day after delivery, without any complaint from the severity of the labour.

### C A S E VI.

*In a letter from Mr. Cadby, at Blandford.*

**H**E was called to a case, in which the midwife had pulled the body of the child from the head, which was left in the uterus. This he immediately delivered, by fixing the curved crotchet on the head, and his fingers in the child's mouth. In Mr. Giffard's Cases of Midwifery, case 69th describes the head of a foetus, six months old, left in the uterus, and delivered with the hand. Mons. Lamotte, book iii. chap. xxiii. has a case of the head being left in the uterus, the body having been delivered and tore from the head with great force. And in the last case of the supplement to his Treatise, there is a case, in which another gentleman could not deliver the head, which was separated from the body, and left in the uterus. Nevertheless he went to bed; and the first news he heard in the morning was, that the head was delivered by the mere assistance of nature.

Dr. Grange, of Hatfield, told me of a case, in which he and Mr. Wilson, of Enfield, were fatigued a whole day in delivering a head, which was so slippery, that for a long time they were not able to open or fix an instrument upon it. He was convinced, that if they had had the instruments mentioned in case iv. the operation would have been more easily performed.



## COLLECTION XXXVII.

*Cases of two or more children delivered at one birth.*

[Vide Part i. Book iii. Chap. v. Sect. i.]

*C A S E I.*

**I**WAS bespoken to attend a patient, who was of a delicate and tender constitution, and had suffered much in a former labour. I was called to her in the evening, and found the os uteri but very little open. The head of the child presented; but the pains were weak and seldom. Expecting that it would be tedious and lingering, as the former, I sent for Mrs. Maddox, my midwife, to attend her, who was to call me when she found the woman near delivery. I was summoned in about two hours, and found the os uteri largely open, and the membranes pushed down without the os externum, which had an uncommon feel. When I introduced my finger into the vagina, I felt these membranes and waters as coming down at the side of the head. As the mouth of the womb was largely opened, and these membranes, with only a small quantity of waters, were hanging loose without the external parts, I pulled them away; but to uching in the next pain, I found another set of membranes and waters still before the head. I also felt through them that the fontanelle presented; and by the futures, that the forehead was to the left side, and the vertex to the right. Being afraid that this position would occasion a tedious labour, I pushed up the forehead, that the vertex might advance; in doing which, the membranes broke, and the head immediately was forced down to the lower part of the pelvis. In two or three pains more, although the fontanelle still presented in the middle, yet the child being small, the face and forehead turned backward to the concave part of the sacrum, and the vertex turned out below the pubes, and was soon delivered. After I had tied and cut the funis, and given the child to an assistant, I examined, to find if the placenta was coming down; but instead of that, the head of another child presented; and as I felt no waters or membranes before it, concluded that those were its membranes which came first down. The vertex presenting, the patient having fresh pains, and not weakened by the former labour, the membranes being broken and the waters gone, it would have been imprudent here to turn the child, and bring it footling, as I commonly used to do in other cases, where the membranes were not broken. On this occasion, I did not mention that there was a second child, lest the woman should be uneasy; but said that I commonly waited to see if the placenta would come down slowly with the after-pains: and the second child being delivered soon after, gave great joy to the mother as well as to the assistants. The two placentas came likewise down gradually in one cake.

*C A S E II.*

**W**HEN called to this case, I was informed by the midwife, that she had delivered the woman safely of the first child, which came in the natural way about six hours before. She said there was a second child, which lay at first so high, that she could not distinguish whether it came right or wrong, till the woman had fresh pains, which increased, and grew stronger in about three or four hours after the first child was delivered.

livered. These forced down, and broke the membranes; although the pains had been frequent and strong, and the head pretty low down, it was still some how retarded. I examined, and found that the right ear presented; that the face was toward the left side of the pelvis; and that the right oregma rested on the pubes. During the next pain, I introduced my hand into the vagina, and pushed up the head at the left side. As the pain continued and increased, I withdrew my hand, and the vertex was pushed down the lower part of the right ischium. Being called to another patient, I left the woman to the care of the midwife, expecting she would soon be delivered with the labour-pains. In about two hours I was again called, and found the head much in the same situation as when I left her, viz. the forehead to the upper part of the left ischium, the occiput to the under part of the right, and the left ear at the pubes. The midwife told me, that she had several strong pains after I went away, but that now they were grown weaker. She also said, that there was a pretty large show at times, and seemed apprehensive of a flooding coming on. I then caused her to be placed in a side position, and delivered the child with the forceps as described in collect. xxviii. part ii. I found at first the delivery was retarded by the wrong position of the head; when that was remedied, another difficulty proceeded from the uterus being contracted before the shoulders, and the funis surrounding the neck three times; which last I disentangled, by slipping it over the head, after it was delivered. This second child, contrary to most cases of twins that I have attended, was much larger than the first. The placentas formed one cake. A case of the same kind succeeded in the same manner with Mr. Palmer, of Bath, when he attended my lectures.

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### C A S E . III.

**I** WAS bespoke, and called to a gentlewoman in labour, who had been very weak and low for many months, and much emaciated, from a spina ventosa in her knee; so that every body was surpris'd at her being with child. She was delivered in a few pains after I arrived. While I was employed in tying the funis, she told me that the motion of the child had been different for the last fourteen days from what it had been before; that in the last fortnight she had felt it low down, and on the right side; whereas, before that time she had perceived it stir higher up, and at both sides. After delivery, she laid her hand upon the abdomen, and called out that it was still very big, I then examined for the placenta, and found the membranes, waters, and head of another child presenting. Without saying any thing of the matter, I slipped my hand into the uterus, broke the membranes, and after getting my hand within them, turned the child, and delivered by the feet. By its being very livid, and the scarf-skin easily slipping off, it appeared to have been dead for the space of a fortnight. The placenta formed two distinct cakes.

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### C A S E . IV.

**A** WOMAN who had bore children before, and was come near to her full time, fell in labour about fourteen days after she had been frightened by the second shock of the earthquake which happened that year. The midwife telling her husband that there was something uncommon in his wife's case, and I being immediately called, she told me that

that she certainly found two children presenting at once, and was afraid that they might entangle and interrupt one another in the passage; that the head of one presented, which she suspected was dead, from the skin of the head feeling soft and pappy, and the bones of the skull loose within the integuments: that the legs of the other presented, which she was certain was alive, from feeling the child move them. No sooner had the midwife given me this information, than the patient was attacked with a very strong pain, and the midwife was desired to make haste into the room, for that she would certainly have work immediately; accordingly she had just time to receive the first child, that presented with the head: it was dead, as the midwife had foretold, and appeared to have been so from the time that she received the fright; and in two or three pains more, the child that presented with the feet was forced down, and delivered alive.

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### C A S E V.

**S** OON after I began to teach midwifery, I was called to one of the poor women who had bespoken me to attend her with my pupils. When I arrived, I found the breech presenting, with the thighs to the sacrum; but as the pains were gone off on the discharge of the waters, and the breech was still high, I expected that it would require some time to stretch the parts more fully before it could come lower down, and be delivered. I went to a coffee-house in the neighbourhood, and sent for those who then attended me; but before they all arrived, a messenger came in a hurry, telling us, if we did not make haste, the child would be delivered before we could reach the place. This was actually the case. I told the pupils, that although they had missed seeing the labour, yet they would have an opportunity of observing the delivery of the placenta. I then examined; but instead of the placenta, I found the breech of another child presenting, in the same manner as the first, which in two pains more was delivered with very little assistance; and the two placentas, which formed only one cake, immediately followed. The children were small; and although the woman was of small stature, yet neither she, nor any of her acquaintance, suspected that she was with child of twins.

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### C A S E VI.

**T** H E arm of the first child had been protruded several hours after the membranes broke, and pretty much swelled before I was called.—As the woman lay on her left side, I tried to introduce my hand into the vagina; but finding the arm obstructed the passage, I doubled it, and easily pushed it before my hand into the uterus. While I went up farther to search for the feet, I found another child inclosed in its membranes; a circumstance which made me advance more cautiously, for fear of breaking them, as they lay toward the left side and fundus uteri, but more forward than backward. I had introduced my right-hand, and finding that the legs of the child lay backward, and to the right side, toward the fundus, I was obliged to withdraw that hand, and introduced my left, with which I brought down the legs, and delivered that child. The uterus immediately contracting, the placenta and membranes of the first child, with the membranes and waters of the second, presented; but the placenta was lowest, and being separated from the uterus, came easily down into the vagina, by pulling gently at the funis. Having delivered the cake, and finding a pretty large



large quantity of blood follow, I insinuated my right-hand into the vagina, and found within the membranes the head of the other child presenting. Pushing farther up, and breaking the membranes, I turned this child, and brought it footling also, as described in collect. xxxii. I ordered a cataplasm to be applied to the first child's arm, which was swelled; the swelling in a few days subsided, and the child did very well.

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C A S E VII.

I WAS called to a woman in labour. The first child presented with the hands, feet, and funis in the vagina; I tried, as she lay on her left side, to introduce my hand and deliver the child, but as I could not keep the patient steady in that position, I turned her to the supine posture. After I had introduced my hand into the uterus, I found the head high up to the left-side; I then withdrew my hand, took hold of the legs, and delivered the child. Having tied and separated the funis, I desired the midwife to sit down and deliver the placenta, by allowing it to descend slowly, but seeing her attempting to push up her hand, I desired that she might rather wait, and signified, if there should be any difficulty afterward, I would assist. She telling me there was some more work for me, I immediately suspected that there was a second child; which I found presenting in the same manner, and brought footling also. The placenta not following for a considerable time after, I pushed up my right-hand into the uterus, separated and delivered one that adhered to the left side, and after that the other which adhered to the fundus.

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C A S E VIII.

*Three children delivered by Mr. Prosser.*

I WAS sent for to a poor woman who had been in labour some hours, being eldest pupil to Dr. Smellie, who was then otherwise engaged. I touched her, and felt through the membranes both hands and feet blended together. The os internum being well dilated, I broke the membranes, disengaged the latter, and pulled them down to the passage, pushing up the head at the same time; by these means I finished the delivery.

I sought afterward for the placenta; but finding a more than usual resistance, I slid my hand along the cord into the uterus, where I found the membranes and waters of a second child. I gave a gentle pull to see if the first had not its own placenta; but finding a resistance, I opened the membranes of the second, which presented like the former, and consequently required the same treatment. Having divided the cords, I pulled them sometimes alternately, and sometimes together, but without effect; so was induced to introduce my hand a second time, and extracted two placentulas firmly connected by an intervening membrane. By this time I thought my labour ended; but was deceived; for in a few minutes after she complained of fresh pains; and on enquiry, it appeared to be a third child, which presented a right-hand and foot. I introduced my left-hand into the uterus, and pushed up in order to get at the other foot; but the uterus being strongly contracted to the body of the child, it was with great difficulty I accomplished it; the placenta followed soon after.

## C A S E IX.

*The delivery of three children ; described by Dr. Harvie, London.*

**H**E was called to a patient about the latter end of the fourth month of her pregnancy ; but she was as big as one come to the full time, and apprehensive of an ascites in the abdomen ; however, on examining the belly, and she being sensible of the motion of the foetus, he found the bigness proceeded from the stretching of the uterus. Her complaints from this time till she fell in labour, were chiefly cardialgia, vomiting, difficulty of breathing, and costiveness ; for all which she was often bled, and seldom missed taking *magnesia alba*. From the constant vomiting she daily lost strength, and was much emaciated. When she was taken with labour-pains he found the os uteri open to the diameter of half-a-crown, and the head of the child very low. Her pains being slow and weak, he ordered a clyster, which operated. After which the pains went quite off. When he called next day, he was informed that the membranes were broken, that a large quantity of waters were come off, and still continuing to drain away ; and he was informed that she had not been so easy for four months ; for she could now breathe, and had taken some nourishment, but had no pains. He was again called the following day at one o'clock in the morning. The pains were not strong or frequent ; but the os uteri being sufficiently dilated, the child was born in about fifteen minutes. After tying the navel-string, and giving the child to the nurse, he found the head of another presenting. At the first pain he broke the membranes, and in two more this child was also delivered. After taking care of this, he found there was a third from the still great distention of the uterus ; but the patient being faint, and in order to avoid the danger from the sudden emptying of the uterus, he pinned a long towel moderately tight round the abdomen, and gave her the following draught :—*R Confect. damocrat. ʒfs. Aq. alexiter. simp. ʒifs. Aq. nucis mosch. ʒij. Tinct. thebaic. gt. xv. Syr. alb. ʒi. M.*—Examining again, and not finding the membranes pushing down, or any part of the child ; and being apprehensive that it might present wrong, he searched higher, and found the head and membranes at the brim of the pelvis. These being broken, this third child was delivered in the course of the next pain. Although the patient had hitherto lost but little blood ; yet as there was more coming, and the woman was weak, he gently assisted and brought the placentas away ; two of them were joined together, and one separate. By this time she was very faint ; but the draught taking effect, she dropped asleep, and after some hours, so far recovered as to be able to bear the fatigue of shifting. She had a severe cough for three weeks before delivery which gradually abated afterward ; and she pretty well recovered. The children were three fine boys, alive and well. He observes, that from several twin-cases which have fallen under his notice, he has reason to think, that one principal evidence of a woman being with child of more than one, is the uterus rising much earlier up in the abdomen than is usual when there is only one. The above patient was as big at the latter end of the fourth month, as women are commonly at their full time.

## C A S E X.

*By Mr. Giffard, Case 151.*

**I**WAS sent for about four o'clock in the morning to the wife of a snuff-box maker in Dean-Street, near Red-Lion Square, who was, according to her calculation, about seven months gone with child. I had been

with

with her about three months before, when she was under some apprehensions of miscarrying, and by proper applications I cured her at that time; but now one foetus was brought away before I was sent for. I would have immediately passed my hand in search of the placenta, but the woman could not be readily persuaded to admit me, and made some struggle, until she was overcome by the persuasions of her friends, and the apprehension of the danger she was in, should it not be brought away; so that at last she permitted me to pass my whole hand into the vagina, and soon to the os internum; which I found so much contracted, that it would scarcely admit the ends of four fingers. But having by degrees dilated the orifice, I introduced my hand into the uterus, and found something harder than a placenta. This proved to be another foetus inclosed in its membranes, which were much distended by the waters. I broke the membranes immediately with the ends of my fingers, and then putting my hand within them, I searched for the feet. The first part I met with was the head, which I passed by, and went on in search of the feet, and soon found one foot. This I brought out, and as I had sufficiently dilated the os internum, the foetus being likewise very small, I judged I might easily draw it out by the leg already brought down, without giving her fresh pain by passing up my hand again to fetch down the other. I therefore took hold of the leg I had secured, and gently drew it forward; I say gently, for if I had used any force, I might have torn it from the body, the leg being very small and tender; at the same time I advised the woman to assist by bearing down strongly, which much contributed to the bringing out of the hips, body, and head, all which soon followed. Upon passing up my hand to fetch the after-burthens, there being two entirely separate, I met with the burthen of the foetus first born, protruded and lying in the vagina; this I immediately brought away, and then repressing my hand, I found the other lying within the uterus, but wholly separated from it, so that I had no more difficulty in bringing this than the former.

In the Memoirs of the Academy at Paris, H. 1727, page 15, 20, 21, is an account of two children delivered eight days after one another.

## COLLECTION XXXVIII.

### *Of monstrous births.*

[ Vide Part. i. Book iii. Chap. v. Sect. ii. ]

#### C A S E I.

THE following history is of two children adhering to one another at the side of the breasts and bellies: they have both hare-lips, and but one navel-string; the vessels separate as they enter the skin of their bellies, and each child has its own. Both were sent to me by the same gentleman, and are among my collection of foetuses, together with other useful preparations, collected from time to time for the information and improvement of students, and now in the hands of Dr. Harvie, my successor in teaching of midwifery.

S I R,

AGREEABLE to my promise, I have sent the preparation, which I hope will fully answer your expectation. The mother, who before had



seven or eight children, miscarried with these at the end of twenty weeks, from her great uneasiness, she imagines, in longing for a chop of bacon. She was taken at first with a considerable flooding, which was moderated by bleeding and anodyne medicines. The next day finding some strong pains, her midwife was sent for, who delivered her in a few hours. Notwithstanding their smallness, and one of them presenting with the feet, she found great difficulty in extracting them, as you will see by the laceration of one of them, which is stitched up again. They had no signs of life. The mother has since had two fine children.

It is remarkable of the father of these children, that he had had no teeth before the age of one or two and twenty; but has now as good a set as I ever saw, and can lift up very great weights with them, &c. From Henry North, surgeon, in Stirminster-Newton, in the county of Dorset.

### C A S E II.

*Part of the skull wanting.—From Mr. Pierce, of St. Thomas's Hospital, apothecary.*

**I**T was a male child, of an uncommon size in his body and limbs, with very broad shoulders, and a short thick brawny neck. The head was smaller than those of most infants that come in due season, as this did. The nose was broad and flat, the eyes full, large, and very prominent, so that the lids could not cover them; the ears were remarkably large and thick. There was no skull to cover the brain, and the edges of the bones of the lower part of the head were as straight and smooth as if they had been sawn asunder immediately above the orbits of the eyes. There were wanting the os frontis on the fore part, and on the back part almost the whole of the occipitis. The ossa bregmatis were entirely wanting; and as there was no scalp, the brain was covered by nothing but the pia and dura mater, which looked of a dark livid colour, and was pushed out in divers places by the brain, so that it made an unequal surface for want of bones to confine it. This inequality and softness, together with the edge of the bones, was what surprized the midwife, and made her expect a more difficult delivery. The account then given by the mother, as the probable occasion of this disaster, is as follows:—When she was near two months gone with child, she was grievously frightened with thinking on Lord Lovat, who was that day to be beheaded. Her husband was gone to see the execution amongst the crowd on Tower-Hill; and when the news came to her hearing, that a scaffold was fallen down, by which accident many people were hurt, and some killed on the spot, she immediately feared that her husband might be of the number, and was greatly affected. While she was under this dread and apprehension, an officious idle woman came to her and said, that a friend of her's, for whom she had a great regard, was killed on the spot, and that she saw his brains on the ground; upon this the poor woman put both her hands on her head in great agony, and immediately fainted away.

**CASE I.**—Philosophical Transactions; N<sup>o</sup> 65, p. 2096, an account of a monstrous birth, by Dr. Dursin; which had two heads, two necks, four arms, and four legs, perfect and well shaped; but only one trunk. There was no appearance of lungs; and only one large heart, one midriff, one umbilical cord, one large liver, one stomach, four kidneys, two urinary bladders, two wombs. There was only one colon, which terminated in two intestina recta. It weighed eight pounds and a quarter; and the length from head to foot was full eight inches and a half.

*CASE II.*—There is another monstrous female birth by Dr. Samuel Morris, N° 138, p. 961. There were two heads; and all the parts double above the diaphragm, and single below, except the appearance of two stomachs. The uterus was of a common size; but the clitoris large; there were only two legs and two arms; the secundines were very large, and weighed about eight pounds. One was dead, and the other just breathed.

*CASES III. and IV.*—Another account of a double birth, in which the children were joined at the breast. No. 2, p. 21. They did not wake and sleep together. They also cried, sucked, and exornerated apart.

The same paper relates, there was such another birth in Wales, and the children lived so long till they could talk to each other; which they did in tears, when they thought that one must survive the other; but both happened to die together.

*CASE V.*—A monstrous birth from Mr. Robert Taylor, much of the same kind as case iii. and iv. in the same Transactions, N° 308, p. 2245.

*CASE VI.*—Philosophical Transactions, N° 453, p. 837. A monstrous boy seen at Montpelier, by Dr. Andrew Cantwell, about thirteen years old; who bears the lower parts of another boy; the fore parts of each face one another.

*CASE VII.*—Reflections on generation, and on monsters, by Dr. Supervile, Philosophical Transactions, N° 456. p. 294.

Besides the above cases, there are several other papers describing births, in which the bones of the upper part of the cranium were wanting; in most of which the cerebrum and cerebellum were also wanting; those that were born alive died soon after the birth.—*Vide* N° 99, p. 6157 N° 226, p. 439. N° 228, p. 553. N° 234, p. 717. N° 251, p. 141. N° 320, p. 310.

In the Philosophical Transactions, N° 487, p. 325, a letter from John Huxham, M. D. to C. Mortimer, M. D. concerning a child born with an extraordinary tumour near the anus, containing some rudiments of an embryo. In the Philosophical Transactions, N° 472, p. 10, an observation of a spina bifida, commonly so termed, by Geo. Aylett, surgeon, at Windsor.

In the Memoirs of the Academy of Sciences at Paris, M. 1701, p. 112, is an account of a foetus found in the ovarium of a woman.—In the same, H. 1703, p. 43, an account of a puppy whelped without a gullet; a circumstance proving that the foetus could not be nourished but by the funis. In the same H. 1711, p. 26, description of a foetus without cerebrum, cerebellum, or spinal marrow.—*Id.* 1712, p. 40, of a male foetus at its full time, which had neither brain nor spinal marrow, and which lived 21 hours, and took some nourishment.—*Ibid.* 1732, p. 309, of a monstrous foetus with two bodies, the one male the other female.

In the German Ephemerides there is a great number of histories of such monstrous productions. *Vide* also Ruysch.

*From Mauriceau.*

IN page 53, and observ. 64, he mentions having seen a dead child of a woman lately delivered at seven months of a monstrous figure, having the arms and the feet quite mis-shapen, and the head without any neck, joined immediately to the breast, having on the head, instead of the brain, a sort of thick flat cap or cawl, like a red wen. This had a production like a tail which reached along the spine as far as the os sacrum; and on the right side of the navel there was a considerable livid tumour like a ventral hernia.

















in which several of the contents of the abdomen were contained. This child had been dead some days before it was delivered, as appeared by the epidermis, which came off easily; and the monstrous figure might be imputed to the disorder of mind and body which a great fright or vexation the mother met with in the beginning of her gestation had thrown her into. In page 301, and observ. 363, he mentioned his having delivered a woman of her first child, which had all the fleshy or muscular parts of its body quite hard and scirrhus. In observ. 118, and page 63, he gives an account of his having delivered a woman in the eighth month, of a child whose head was of a monstrous figure, being without any brain; but instead of all the upper part of the head, there was only a reddish brown substance; there appeared likewise the inferior extremities of the occipital bones, and the two eyes very prominent. Its feet were turned inward. This monstrous conformation was ascribed to great fatigue in a journey.—He mentions having seen at the fair of St. Lawrence, two male children dead, whose bodies were joined together toward the upper part of the thorax. The mother had been five months gone; but no particularities are mentioned at the birth.

Monf. Lamotte, book iv. chap. 14, gives several cases of mutilations and deformities in children.

## COLLECTION XXXIX.

*The Cæsarian section performed on the dead as well as the living subject.*

[Vide Part i. Book iii. Chap. v. Sect. iii.]

### N U M B. I. C A S E I.

**I** WAS called by a midwife to a woman who was attacked with a violent flooding; but she being unwilling that I should examine, and the discharge being stopped before I reached the house, I ordered a mixture of the tinctura rosarum, and liquid laudanum, to be given as there should be occasion; and desired them to send for me if it should again return. She was within a fortnight of her full time; the discharge was sudden, in a large quantity, and soon stopped; she continued free all that day, till toward the evening; the flooding continued all night; and I was not called till next morning, when I found her excessively weak and low. Although she had no signs of labour, yet the os uteri was soft, and a little open, and something like either a coagulum of blood or the placenta presenting. Before I had time to put her in a position for the delivery, she fainted away, was thrown into convulsions, and died instantly. As there were none but the husband and nurse present, I immediately sent for an apothecary, who lived next door. All the by-standers being fully convinced of her death, I immediately made a large opening in the abdomen, with a view to save the child. Though the woman was pretty fat, yet the parietes of the abdomen were thinner than I expected, from the large extension of the uterus. I then made a large opening in the uterus also, which was not a quarter of an inch thick. A large quantity of waters were immediately discharged into basons, in all about two quarts. I then extracted the child, which was large and plump, but had no signs of life,



and seemed to have been dead several hours by the stiffness of the joints. I now leisurely examined the uterus and secundines. The uterus and the woman's body seemed to be quite destitute of blood; for scarce one drop appeared on opening the parts. I separated the membranes slowly, which adhered to the inside of the uterus. In this operation, I perceived numerous filaments, like hairs, that were extended; and in separating, some shrunk into the uterus, and some to the membranes. I found the placenta adhering to the lower part and left side of the uterus, and about three fingers breadth of it lying over the os uteri. I then also separated the placenta, and found filaments about the size of hogs' bristles, shrinking in as the former. All this part of the placenta looked florid, but that which was disengaged, and over the os uteri, appeared livid, and split in the middle; which probably was the occasion of the child's death, by allowing the blood to be discharged from the placenta. The woman had easy labours in her former children. The os uteri was thin, soft, and open to the breadth of half a crown. I dilated it with ease, which showed, that if I had been sent for in the evening, she might have been safely delivered. The head presented; but in the hurry, I did not then observe the position of the body.

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### C A S E II.

THE woman was turned of 40, of a gross habit, and had never borne a child. In the seventh month of her pregnancy she received a fall, that brought on a large discharge; which however, by proper management was soon restrained, though it commonly returned on the least motion or exercise. About the middle of the eighth month I was called, when it had returned in larger quantity than before; but it diminished by degrees, and soon stopped altogether. What seemed to me most necessary at that juncture, was to keep up her strength by a nutritive diet, consisting of the lightest kind of food. But being apprehensive of danger from her great weakness, I advised the husband to call in a physician; who approved of what had been done, and ordered the same regimen to be continued. After this she went on tolerably well, having now and then some small returns, though not so much as to require any other method; for the delivery could not have been attempted with any probability of success, even although the discharge had been in greater quantity, the os internum being close shut, and extremely rigid. Two or three weeks before her full time, she was taken with slight pains, upon which I was called, and found the os internum open about the breadth of a sixpence and within it a soft substance, that felt like the placenta or coagulated blood. As she had rested but indifferently the preceding night, was faint and weak, and had some small returns of the discharge, I desired a consultation with another of the profession; and the family being strangers in England, mentioned some of the most eminent in my own way. One of the women proposed Sir Richard Maningham; but he being engaged, Dr. Sands was sent for; who gave it as his opinion, that it was still proper to support her strength by broths and nourishing food, and more safe to wait until the slight pains should bring on the right labour, than to use any violence to deliver her immediately. I was again called about nine o'clock the same night, when she was taken all on a sudden with frequent faintings; in one of which she expired as I entered the room. This sudden alteration prevented me from making any attempt; and indeed, had not this event happened, I should have been afraid of her dying in the operation, because of her gross

and







and weak habit of body. Cases of this kind require the utmost prudence and caution. I have saved many women and children by immediate delivery, when the patients were not very low and weak, or wore out with frequent losses of blood, and when the discharge happened all on a sudden, in a good constitution, the parts being open, soft, and used to extension by a former birth; but when the constitution is gross, the parts rigid, and the patient weakened by interrupted floodings, I have always practised the foregoing method, which has often been attended with success.

As soon as all present were satisfied that this person was dead, I opened her abdomen, and having taken out the child, examined the uterus. I found the placenta firmly adhering to its inferior and posterior parts; about two fingers breadth of its lower edge was separated from the os internum, which it covered; and this was what Dr. Sands and I had felt in the morning. Having extracted the secundines, I tried with my hand to open the os internum from the inside of the uterus; which with great force I performed, not without tearing it about two inches on one side. By this it appears how difficult it is to dilate this part in women going of a first child, especially when they are pretty old. Indeed it is sometimes impossible to be done before they come to their full time; and even then, not until the parts are thin, soft, and largely opened by previous labours; as described in col. xxxv. case viii. and x.

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### C A S E III.

THE woman was above eight months gone with her fourth or fifth child. She had got up and fatigued herself pretty much in the morning; in consequence of which she was seized with pains in the back. She tried to make water, and all on a sudden was taken with a violent flooding, which almost filled the chamber-pot. Her midwife, Mrs. Draper, being sent for, desired they would call me immediately. When I came, the flooding was stayed. I endeavoured to examine, but could not reach the os uteri on account of her shivering. As she was easier, and not much weakened, they would not allow me to persist in my endeavours. I told her friends the danger to which she would be exposed, if the flooding returned with violence; and exhorted them in that case to send for me immediately. In the mean time, as her pulse was full, I ordered ten ounces of blood to be taken from her arm, directing her to keep in bed, and take frequently two spoonfuls of the following mixture:—Infus. rosar. rubr.  $\zeta$ v. Elix. vitrioli, gut. x. Syr. e meconio,  $\zeta$ j; and that a linen rag dipped in the following decoction should be put up the vagina:—Rx. Cort. granator. querci. flor. balaustior. rosar. rubr.  $\bar{a}$   $\zeta$ j. coq. in aq. font. q. s. ad  $\zeta$ iv. colaturæ, adde alum. rup.  $\zeta$ ss. vin. rubr.  $\zeta$ j. —She was again attacked with a flooding about eleven at night, and sent for the midwife; and though she was not at home, they delayed calling me till about six in the morning. I felt her pulse, which I could scarce distinguish: her extremities were cold, a cold sweat had spread all over her face and breasts, and she could hardly speak. I immediately ordered her a cordial julep, with tinctur. castor. and sp. salis ammoniac.; and in the mean time gave her some warm red wine. Her vessels were so much emptied, that the flooding was serous and much stayed. I ordered ligatures above the knees and elbows, and warm cloths and bricks to be applied to her feet and hands. All these steps were taken in order to recover her strength and spirits before I attempted to deliver; but before my directions could be put in practice, the

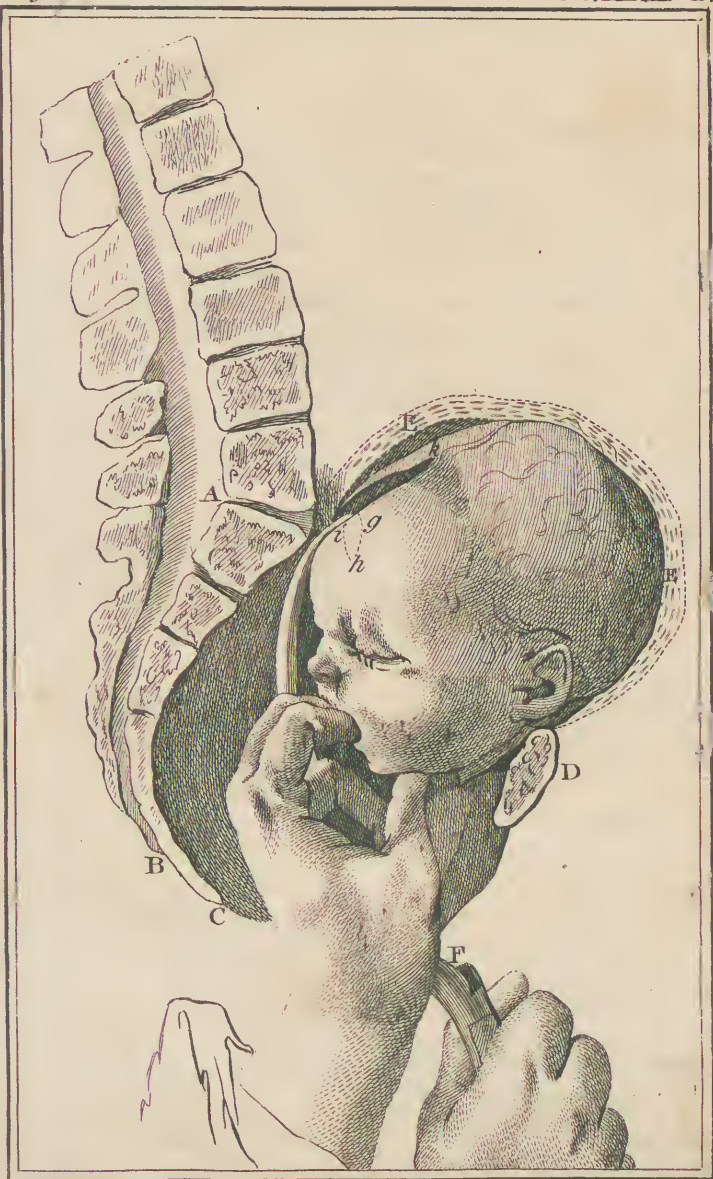
she was taken with a violent convulsion, and expired immediately. I then proposed to try to save the child, if alive, by performing the Cæsarian operation; a proposal to which they agreed. In order to prevent reflections, and ascertain that the woman was really dead, I sent for the apothecary, and immediately opened the abdomen and uterus. Then I extracted the child; but felt no pulsation in the funis umbilicalis; neither was there any pulsation felt at the heart. I rubbed the child's head with spirits, slapped the nates, and shook the body to give pain and make it shrink. A nifus of this kind, operating on the nerves, sometimes stimulates the heart to contraction, and affords an easy admission of the air to rush into the lungs. I then tried to inflate the lungs, by blowing in at the child's mouth; but all these efforts were to no purpose, though made in less than four minutes after the mother expired. The child was plump and full grown; the scrotum and lips were not livid: but the joints were a little rigid; a circumstance which denoted that it had been dead some hours. I now examined more narrowly the following particulars:—On opening the woman, I found the parietes of the abdomen thin and tense from the stretching of the uterus. I made an incision with an armed lancet, which was the instrument easiest procured, from the navel along the linea alba to the ossa pubis, through the integuments and peritonæum. The uterus, which was fully distended with the waters, appeared through the openings, and stretched the lips several inches from each other. I then opened the uterus, which was about three eighths of an inch thick; there seemed about three or four pints of water contained in the membranes. When I came to examine the adhesion of the membranes and placenta, I found the membranes adhering every where to the uterus; and on separating them slowly, observed numerous small filaments like hairs extended from the one to the other. The placenta adhered to the back and lower part of the uterus. I introduced my finger up the vagina to the os uteri, which was opened about half an inch, and found the lower edge of the placenta covering it on the inside, adhering all along the lower and back part of the uterus. This I separated slowly from the uterus; and here likewise appeared filaments rising from the one to the other, as in the membranes; but as large as hogs' bristles. But there was a greater roughness or inequality, resembling small indentations in that part of the uterus, and not so smooth as where the membranes adhered. There was no red blood in the vessels to be seen, because the body was quite exhausted. Where the uterus was opened, there appeared the mouths of a great number of vessels, some of them half an inch in diameter. The flooding seemed to proceed from the position of the placenta over the os uteri, which always happens when the placenta presents first. The head of the child was turned down to the os internum.

Monf. Lamotte, in book iv. chap. xi. mentions some cases from other authors, and gives several himself, in which the passage to the uterus was shut up by callosities. But he opened and made way for the birth of the children, without being obliged to perform the Cæsarian operation. *Vide collect. xxxi. case xxvii.*

#### NUMB. I. CASE I.

*Described by Mr. Duncan Stewart, surgeon, in Dungannon, Ireland.*

THE histories of the Cæsarian operation being so few, I send you the following:—Alice O'Neale, aged about 33 years, wife to a poor farmer near Charlemont, and mother to several children, was taken in labour







bour, but could not be delivered of her child by several women who attempted it. She remained in this condition 12 days; the child was thought to be dead after the third day. Mary Donally, an illiterate woman, but eminent among the common people for extracting dead births, being then called, tried also to deliver her in the common way; and her attempts not succeeding, performed the Cæsarian operation, by cutting with a razor, first the containing parts of the abdomen, and then the uterus; at the aperture of which she took out the child and secundines. The upper part of the incision was an inch higher, and to one side of the navel, and was continued downward, in the middle betwixt the right os ilium and the linea alba. She held the lips of the wound together with her hand till one went a mile, and returned with silk, and the common needles which tailors use. With these she joined the lips in the manner of the stitch employed ordinarily for the hare-lip; and dressed the wound with whites of eggs, as she told me some days after, when led by curiosity, I visited the poor woman, who had undergone the operation. The cure was completed with salves of the midwife's own compounding.

In about 27 days the patient was able to walk a mile on foot, and came to me in a farmer's house, where she showed me the wound covered with a cicatrice; but she complained of her belly hanging outward on the right side, where I observed a tumour as large as a child's head; and she was distressed with a fluor albus, for which I gave her some medicines, and advised her to drink decoctions of the vulnerary plants, and to support the side of her belly with a bandage. The patient has enjoyed very good health ever since, manages her family-affairs, and has frequently walked to market in this town, which is six miles distant from her own house.

The following is from Dr. King, in the same volume, article 38. There is another woman lying within five miles of this place, from whom a midwife took a child, by the Cæsarian operation, near two years ago; I saw the poor woman soon after, and drew out the needles which the midwife had left to keep the lips of the wound together. I perceived the muscles contracted into a lump at the lower part of the belly, which increased, and at last broke and ran considerably. This woman is capable of doing something for her family, with the assistance of a large bandage, which keeps in her intestines. This child which I saw, was not extra-uterine; for several besides the midwife assured me, that a leg of it presented itself to view in the vagina before the operation.

By comparing the time and the distance of Charlemont from Armagh, as mentioned in the last part of Dr. King's letter, with Mr. Stewart's, it probably must be the same woman's case which both of them relate.

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#### N U M B. II. C A S E II.

THE Cæsarian operation performed by Mr. Smith, surgeon, in Edinburgh, communicated to me, and inclosed in the following letter by Dr. Adam Austin:—Sir, Inclosed I send you the case of the woman that underwent the Cæsarian operation. The only remarkable circumstance in it is, that the impregnated uterus may be cut without any considerable hæmorrhage; but it is such a dangerous operation, that it ought never to be performed if there is the least probability of bringing away the child in any shape. I was present when Mr. Smith performed the operation, and recollect the sudden contraction of the uterus, which I suppose prevented the hæmorrhage.

Your's, A. A.

I was sent for to a drummer's wife about ten at night, who had been in labour for six days. She was one of the least women I ever saw, and prodigiously deformed. I touched her, and found something in the vagina so large, that I at first took it for the head of the child; but soon found I was mistaken; for examining more attentively, I found toward the os pubis the os uteri thick, high, and a very little dilated, and through it I felt distinctly the child's head. What I at first took for it proved to be the os coccygis of a very extraordinary size and shape; turned inward quite across the vagina, and reaching almost to the fore part of it. About an inch and a half, or two inches above the extremity of the os coccygis, I felt the ossa pubis, not forming a convexity outward, as they do in a natural state; but were depressed inward, so that I could scarce get up two fingers betwixt this monstrous os coccygis and the ossa pubis. The woman being much fatigued with pains and want of sleep, I ordered an opium pill to procure rest. I visited her next morning, and found she had slept some hours; but after she awaked, she had had violent pains.—Upon touching, I found the os uteri a little more dilated, so that I could feel about the breadth of half-a-crown of the child's head.—The constriction of the parts was such, that it was impossible to deliver her in any manner; I therefore endeavoured, with all my strength, to press downward and backward the os coccygis; but in vain. I then told the women that were about her that it was impossible to deliver her; they begged of me to try any method however desperate. One of them proposed a crotchet; but the passage between the bones of the pelvis was so narrow and so crooked, that it seemed to me absolutely impossible to bring away a child in any shape through them. I promised to pay another visit soon, and to bring some of my brethren along with me, and to give her all the assistance we could. Accordingly several of my brethren visited the patient along with me, viz. Dr. John Lermont, Mr. Drummond, surgeon and man-midwife, &c. who were unanimously of opinion that the child could never be brought through the vagina, and that the only chance she had for life, and even that a very small one, was to undergo the Cæsarian section. This was told the woman and her friends; and to prevent any reflections afterward, we repeated in the strongest terms, the great danger the woman would run in the operation, and that possibly she might die in our hands; but they were resolved to run all risks.—Accordingly ten at night was appointed for the operation. The following gentlemen were present; Dr. Monro, professor of anatomy, Dr. John Lermont, Dr. James Dundas, Mr. Drummond, Mr. Osburn, Mr. Gibson, Mr. Douglas, surgeons.

The instruments and dressings as follow:—1. A common scalpel. 2. A pair of crooked scissors. 3. Two needles threaded. 4. Four large needles threaded for the gastroraphia. 5. Scraped lint. 6. A large compress, napkin, and scapulary. 7. Ink. 8. A cordial to be given during the operation.

The patient was laid on her back on a table covered with blankets, with a pillow below her head. Her body being secured, I seated myself at her right side. I drew a line with ink about six inches in length, parallel to the linea alba, and four inches distant from it, in order to avoid cutting the musculus rectus. I then with a convex scalpel made an incision along the black line, through the teguments and fat. In the middle of the section I gently cut through the muscles and peritonæum, so as to get in the fore-finger of the left-hand; upon which, with the crooked scissors, I enlarged the wound upward and downward, equal to the black line I had made in the



the skin. The epigastric artery was opened, which I immediately stitched. I then cut into the uterus, and tore the membranes containing the child; but as the child was large, I found the incision in the abdomen too small; I was obliged to enlarge it upward to the short ribs, and downward to the ossa pubis, the uterus in proportion. I then extracted the child without any violence, afterward the placenta and the membranes. I put my hand again into the uterus and brought away some coagulated blood. The child was dead but quite fresh. I reduced a little of the gut that came down, and made the gastrophagia at three stitches without any peg. After the first stitch the gut gave me no more trouble. I covered the wound with soft pledgets, applied a large compress, and over all the napkin and scapulary.

The poor woman bore the operation with great courage. After she was put to bed she took a quieting draught with laudanum, and a bottle of emulsion for ordinary drink. She did not lose above four or five ounces of blood during the operation. In the night she bled a little, but it stopped before I got to her; she had not slept, but otherwise was tolerably well. Next day I visited her, she told me she had some slumbers in the morning. About 12 o'clock she complained of sickness at her stomach, with an inclination to vomit; her pulse was then very frequent and small. She gradually grew weaker and weaker, and died about four in the afternoon. There came not away above two tea spoonfuls of blood from the vagina; the uterus was at least one inch and a half thick. Her friends would not allow her body to be opened.

In the Memoirs of the Academy of Surgeons, at Paris, which are now translated, and published by Mr. Neal, surgeon, of the London hospital, there are a great many cases, and also the disputes for and against performing the Cæsarian operation on women when alive.

## COLLECTION. XL.

### *Of laceration.*

[Vide Part i. Book iv. Chap. i. Sect. i.]

### N U M B. I. C A S E I.

**I** WAS called by the friends of a young woman in Park-Street, who had been delivered of her first child by her aunt, who was a midwife in the country at some distance. The fifth day after delivery, the nurse had alarmed the young creature and friends, by telling them that she was tore. I examined and found that the frænum labiorum was rent, but not the sphincter ani. They were all exclaiming against the midwife. I told them that such things would sometimes happen even to the best practitioners, that there was no danger, and that the parts would recover and contract. The great anxiety of the patient was on account of her husband, who was then abroad; she feared that this misfortune would cool his affection. I made her easier, by assuring her, that if she kept the secret, he would know nothing of the matter. I have indeed had cases, though seldom, in which this accident has happened; and from knowing that it commonly occasioned great anxiety to the patient, I spoke privately to the nurse, as in the following case.—

## C A S E II.

**I** ATTENDED an elderly woman of her first child; the head was large, the perinæum was largely stretched and very thin. I held the flat of my hand against it during every pain, to prevent laceration by the head coming out too suddenly. The pains were very strong; and when one was over, I withdrew my hand to get some pomatum to lubricate the parts. In this interval a pain coming on sooner than I expected, and before I could introduce my hand to guard the parts, the head was delivered, and the parts were torn, as in the former case. I told the nurse the misfortune, but desired her not to mention it, because it would make the patient uneasy, and give her (the nurse) much trouble. I assured her the parts would recover, and no bad consequence ensue.

I was desired by Dr. Simpson, in Spital-Square, to visit a woman whom another practitioner had delivered, and where he had stitched the perinæum after it had been rent in labour. The pain and inflammation were very great, and the stitches did not seem to be of any service. I therefore advised to take them out; the patient was easier, the inflammation abated, and the parts recovered.

## C A S E S III. IV. and V.

**I** WAS called by a midwife to a woman on the fifteenth day after delivery. The perinæum, vagina, and rectum, were torn into one about the length of two inches, which prevented the retention of the fæces. The edges of the lacerated parts were beginning to skin over. I attempted with scissars to pare the edges, as in the hare-lip, but could not possibly hold the parts so as to effect this purpose. I then armed a lancet, and with the point scarified them, and with great difficulty made two deep stitches through the vagina and rectum, and two in the perinæum; but in two days this brought on a large inflammation, and the stitches all tore out. The parts digested and skinned over, but did not cement or join together; however, they contracted in such a manner, that in three months after, she could retain her excrements.

I attended in two days at different times, where the labours had both been tedious from large children. The external parts were much inflamed, and mortified sloughs were discharged from the vagina; after which the urine followed involuntarily into the vagina. On examining, I found a passage from the bladder into the former. They both had made water freely for several days before I was called, so that I was certain the openings into the vagina proceeded from one of the mortified sloughs casting off from the parts. I tried in the first to make a future to bring on an inflammation, so as to contract the opening, but could not succeed; and they continued in that miserable situation.

## C A S E VI.

**I** WAS called by Dr. Thomson, in Camberwell, to assist him in delivering a woman where the arm of the child presented. He told me that the woman had been so torn in a former delivery, that she could with difficulty retain her excrements. Some time after her recovery, we examined the parts, and advised with others, but found it was impossible to pare the parts so as to get them to unite with the future. Besides, the vagina and rectum, where the laceration ended, felt so thin that they could not

not join at that part. One of my pupils told me he had succeeded in a case where only the perinæum was torn, by making immediately the twisted future, as in the hare-lip; however, as rents of the perinæum only are of little consequence, I never tried that method, imagining it dangerous to expose the woman so soon after delivery; and where the vagina and rectum are torn into one, it is impossible to use the twisted future. This last case is of more consequence, on account of the involuntary discharge of the fæces; though in time the parts by degrees recover in some measure their retentive faculties.

### CASES VII. and VIII.

A WOMAN, from a distorted pelvis, had lost her child in a former labour, and was in labour of the second, which proved tedious also. I was called, and just as the head was delivered, entered the room; but as the child stuck at the shoulders, I delivered the body in a succeeding pain. On introducing my hand into the vagina, I was surprized to find part of it torn from the right side of the os uteri, about three fingers breadth. The placenta soon followed, after which I again examined, and was certain of the laceration, only the rent felt smaller, and the os uteri was a little torn also on that side. This being at some distance in the country, I desired she would stir as little as possible. I was afraid of the worst from the laceration of these parts. The child was dead, but the woman recovered without any bad symptoms. I delivered her afterward of another, which was small and alive; and I found a large gap or chasm at the side of the os uteri. I have had some others, in which I have been sensible of the os uteri having been rent, but never found it of bad consequence, unless the patient was thrown into a fever by bad management, or other dangerous symptoms. These might bring on a mortification sooner in the uterus, by the inflammation at that part in consequence of the rent, I must except, however, cases x. and xvi. of col. xxxv.—*Vide* also col. xxxi, case xxviii. col. xxxiii. No. ii. case ix.

A woman about 40, was in labour of her first child. She had been ricketty when a child, and for several years was troubled with an asthma, and had recovered two or three times of an anasarca, that affected all the membrana cellulosa on the surface of her body. When I was called to her in labour, the dropical swelling prevailed to a greater degree than formerly. She had been several days in labour; the membranes were not broken, and no waters could be felt; the head presented, and was squeezed down into a very narrow pelvis. She was much sunk, and her pains diminished. During the time when the pains were strongest, she felt as if something in her belly had torn or given way on a sudden, and as if her belly was grown flatter, and less stretched. The pelvis was so narrow, that there was a necessity to deliver by opening the head, and extracting the child with a crotchet, as directed above. On introducing the hand to deliver the placenta, the uterus was found torn at the fundus, and the intestines pushed down. The placenta was cautiously delivered, and the intestines returned. The uterus felt lax; there was no great flooding. In order to avoid reflections, this accident was kept secret. The torn part was so large as to admit the hand to pass it. She seemed perfectly free from pain, but very weak, had no vomitings, convulsions, or flooding, but died ten or twelve hours after.



## C A S E IX.

*In a letter from Mr. —,*

**A**BOUT two months ago, I was called to a poor woman who had been in travel for eight days. When I came, the midwife, a perfect goddess with the good women, had left the unhappy woman with this expression, "That she had no travel-pains, and would not be delivered before she had more pains." But when I came, I found her in the lowest condition a woman could be in and alive; for I could not perceive any pulsation of her arteries. Much against my inclination, I was persuaded by some of her friends, and after examination found the os tincæ so much dilated, as to admit four of my fingers. I found likewise the chin of the fœtus presenting, and resting on the os pubis of the mother. The waters were voided long before. I immediately endeavoured to grasp one of its legs, which I found, and soon delivered the woman of a dead child; but when I again introduced my hand into the uterus, to my great trouble, I found the in estines. She had been frightened the day she was first taken in labour. According to your prudent advice, I spoke nothing of the matter, but pronounced her a dead woman, and she accordingly expired in less than six hours after.

Lamotte, book iv. chap. v. gives two cases, in which the uterus was torn by the violence of the pains. One woman lived three days after, and the other four. In one of them, when opened, the rent part where the child had passed through, was so contracted as just to admit the end of the little finger.—In the Memoirs of the Academy of Sciences, H. 1724. p. 36—52, are cases of lacerations of the womb in delivery.—Mauriceau, in observation 577, gives an account of a little woman who he saw two months after she was delivered, who had an involuntary discharge of urine from a long and tedious labour, which occasioned a suppuration in the vagina and bladder. From this a fistula remained, and through it the urine passed. He gives two more cases of the same kind.—*Vide* Lamotte, book v. chap. v. on contusions and lacerations.

## N U M B. II. C A S E S I. II. and III.

*Inflammations of the pudenda, &c.*

**A** WOMAN complained, after the third day, of a pain and hardness in the right labia pudendi. On examining and enquiry, I found the swelling and pain began to be perceived only the night before. I ordered stupes to be applied, wrung out of a decoction of emollient herbs, and to be repeated frequently, and in the intervals directed them to anoint the parts with ungt. sambuci, by which method the swelling subsided, the pain abated, and in four or five days disappeared entirely.

The day after a severe and tedious labour, the external parts of a woman in her first child, were so excessively swelled, that she could neither make water nor go to stool, although she had an inclination, and had tried frequently. I prescribed the same method as above; only instead of the emollient ointment, I advised a large pulvise of bread and milk to be applied and renewed after every stuping. Next day the swelling was so abated, that the patient made water freely, and went to stool; and the whole complaint, by the continuance of those applications, went off by degrees, so that the woman recovered,—*Vide* collect. xiv. No. iii. case iii.

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I was called by a midwife to a woman the fifth day after delivery. The labour had been tedious and severe, occasioned by a large child; the external parts were very much swelled and livid; the pain from the inflammation had been very great, but was then a little abated; a circumstance which made me afraid that she was in danger of a mortification: however, I was in hopes, from her having had a plentiful discharge of the lochia, which still continued, that the uterus was not affected. She had also made water several times, although with difficulty; but had no stool. After she was relieved by a clyster, I ordered a fomentation of the emollient herbs with some spirits of wine and sal ammoniac, with which the parts were frequently stuped and fomented. An emollient cataplasm of bread and milk was applied; after every fomentation the swelling and pains abated more and more. About the ninth day several mortified sloughs cast off, both from the labia and vagina. The cataplasms were continued, and a large doffel dipped in digestive, and kept in the vagina, to prevent contractions or coalitions. The parts recovered.

#### CASES IV. V. and VI.

##### *Inflammations of the uterus and neighbouring parts.*

**B**EING called to a woman on the third day after delivery of her first child, and finding that she complained of much pain and hardness above the pubes, I examined the abdomen with the hand below the bed-clothes, and found the substance of the same harder and larger than it usually felt. I was certain that it could not be from any distention of the vesica urinaria, because she had made water frequently. I was told that the labour was long and tedious; that she had in time of it pressed her belly against the lid of a high chest; that she complained of the pain immediately after delivery, and was in torment ever since. I was much surprized to find, that although the pain had prevented sleep, yet there had been and still was a plentiful discharge, and but little fever. I imagined that the complaint proceeded from the external parts that had suffered from a contusion, by the imprudent forcing them against so hard a substance; her pulse being a little quick, she was bled in the arm to the amount of about six ounces. An emollient clyster gave her a plentiful stool; the abdomen was stuped or fomented with milk, water, and a little brandy; and a pultice of fresh cow-dung, softened with fresh butter, was laid all over the abdomen. These were the only remedies then to be had. I gave her ten grains of the pil. Mathæi: she had a pretty good night; but when the effect of the opiate was over, the pain returned in the morning. The abdomen was again stuped with a decoction of the emollient herbs, and a cataplasm of loaf-bread applied, as the smell of the former was disagreeable to the patient. These applications were repeated twice a day; and in two days more the pain, tension, and hardness abated, and the patient recovered.

I was called to a woman on the fifth day after delivery. She told me, that the midwife gave her great pain in tearing (as she called it) the placenta from her right side; and that she had sent for me to examine a swelling there, which she felt with her hand. She was a lean woman: I felt the uterus contracted like a round ball; but on the right side a substance about the size of a goose-egg; from this proceeded a round and long substance about the thickness of two fingers, which ended at the groin of that side; the examination of these particulars gave her great pain. Much the same method was used to this woman as in the former case, viz, venesection, clysters,

clysters, fomentations, and emollient cataplasms; besides proper management as to the six nonnaturals, and keeping her in breathing sweats. The swelling on the right side diminished; but she was not free from pain till after the twentieth day.

A gentlewoman in her second child had been delivered by a male practitioner, who gave her great pain in delivering the placenta; and this has continued more or less ever since. I was bespoke to attend her in her next labour, when she had an easy time; the placenta came down of itself; but in order to satisfy her and myself, I introduced my hand into the uterus to examine. I found all sound on the inside; nothing of any kind of tumour, hardness, or unequal contraction to account for the violent pains she formerly complained of. By proper care and management she recovered, and was free of former pain for four weeks, which afforded great hopes of a perfect cure; but it afterwards returned with as great violence as before. I have delivered her three times since, and her labours have been safe and easy. She was always free from the pains for three or four weeks after. It is also remarkable, that she was always easier when with child; from which circumstance her husband used to alledge that he was the best doctor.—The pains were mostly on the right side toward the groin, but they extended quite round her back and loins. The principal physicians in London were consulted from time to time; and she tried many different remedies; including the cold and hot baths, with all kinds of anodynes and evacuations; but she was not in the least relieved, neither could any of the profession find out the cause of the excruciating pains; which in general passed for a nervous rheumatism. Finding her free from these pains after delivery when she kept in bed, and before she went abroad, I after the next delivery kept her longer in bed, and in breathing sweats; but notwithstanding this caution, the pains returned and did not abate their violence till she was again with child.

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### C A S E VII.

*A violent inflammation of the uterus, an imposthume forming, and discharged at the navel.*

I WAS called to Mrs. S——, in Holbourn, who came on purpose from the country to be delivered of her first child. The child presented fair, yet she was in strong labour for five or six hours: the night was cold, and she over-reached and strained herself too much, by hanging on women's shoulders and backs of chairs, and was at the latter end quite unmanageable. She would not go to bed when it was necessary; but tumbled about the floor. At last she was safely delivered of the child and secundines; the bed was in a large closet with no fire-place in it. She was much better next day than I expected; but complained of pains in her back, arms, and haunches, from her over-straining these parts in time of labour. Her nurse being taken ill, could not attend her so much as was necessary; so that she caught more cold, and the perspiration stopped. She was attacked on the third day with violent pains in her belly, and had no appearance of milk in her breasts: in consequence of her taking a sudorific and opiate, she rested better, sweated much, and was easier next day. The discharge of the lochia was in sufficient quantity; but her pulse was low and quick. The pains returned at night; she had little rest, and did not sweat.



On the first day a hardness and swelling had been perceived above the os pubis, and the pain increased. I ordered elect. mithridat. ℞. to be taken every eight hours, with the following draught:—℞. aq. cinnamom ʒiss. Cinnamom. vinos. ʒfs. Tinct. castor. sp. cor. cervi, ā gt. xxx. Syr. croci. ʒfs. I also prescribed a paregoric draught to be taken at night. ℞. Aq. alexiter. simp. ʒiss. Nucis Moschat. vinos. ʒij. Tinct. paregor. gt. xxx. Syr. e meconio. ʒfs. She had no drought; her pulse was low, and she was naturally of a lax habit of body; she rested better and had plentiful sweats; but the lochia had a bad smell, and I suspected that a gangrene was beginning. I ordered her belly to be fomented with bladders, filled half full of water, as hot as she could endure it. The boluses and draughts were continued; her pains and tension of the belly diminished; the discharge of the lochia increased; as she had pains in her back, and was costive, I ordered an emollient clyster with ʒij sal nitri in it, which gave her two motions. This relieved the pains considerably; but on the sixth night they returned, and the swelling and hardness increased on the left side as high as the navel. The pain was so acute, that she took two of the paregoric draughts in two hours before she was relieved. This method was continued till the eighth day, when she was taken with a violent looseness. She seemed at first relieved by the stools of the swelling and pain; but as they weakened her much, I was obliged to check them by ordering aq. cinnam. simp. ʒiv. Cinnam. vinos. ʒj. Elect. e scordio. ʒfs. Syr. e meconio ʒj. four spoonfuls to be taken every two hours, or as there should be occasion. Her common drink was rice-gruel, with red-wine, and the white decoction; she had the paregoric draught repeated at night; the looseness went off; she rested and sweated that night, and was tolerably easy next day; but the swelling and hardness of the belly were not removed. She continued in this way to the twentieth day, being obliged to take the draught every night. She had frequent returns of the loose stools, about two or three or four in a day; but when they recurred too frequent, the former mixture was repeated, with the decoct. alb. She frequently took hartshorn jellies and broths, to keep up her strength. All this time she had no cold shiverings, although I suspected from the seventh or eighth day that an imposthume was forming; but I was in hopes, as there was a large discharge of the lochia, of a reddish colour and good smell, although it did not diminish with the loose stools, yet it might in time carry off the disorder. This, however, did not happen. An abscess broke at the navel on the twenty-ninth day; and a large quantity of matter was discharged; this relieved her of all her pains; but every now and then, when the discharge stopped, the tumour and pains returned, and were relieved by the matter forcing its way afresh, or dilating the opening. The discharge continued several weeks, by which she was much weakened; but at last she recovered.

#### C A S E VIII.

AS there are seldom inflammations in the uterus without obstructions of the lochia, and seldom obstructions of the lochia, but there must be more or less of an inflammation of the uterus, they might be joined together; but as I have planned cases to illustrate the first Part, I shall for method sake give some in this place, as well as in the other.

I was called to a woman on the ninth day after delivery of her first child. The labour had been tedious, but safe; for three days she seemed to be in a good way; but her attendants imagining she ought to be supported with  
cordials,

cordials, gave her punch for her common drink. This threw her into a fever, and produced violent pains in the lower part of the abdomen. The lochia were obstructed, and the pains grew very weak. I was told on my arrival, that the pains had begun to abate, and she was much better.—I found her pulse quick, low, and small, with an intermission now and then, the abdomen much tumified and hard; a small discharge on the clothes of a brown colour and cadaverous smell. All these bad symptoms shewed plainly that she was in imminent danger, and that the reason of her pains abating proceeded from a begun mortification of the uterus. The friends were much surprized when I told them of the hazard, for they imagined she was out of danger. In a few hours she was attacked with the singultus, grew delirious, and died next morning.

As the cortex was not then known to be efficacious in mortifications, and indeed in this case, as proceeding from a violent inflammation, and not from weakness, I am afraid could have been of little service, I ordered some warm medicines and fomentations, viz. first warm stupes with the aromatic herbs, and a large epithem of theriac. venet. applied to the abdomen; and internally a mixture, four spoonfuls to be taken frequently, of aq. pulegij, theriacalis,  $\bar{a}$   $\bar{z}$ ijj. Syr. croci. q. s.

## COLLECTION XLI.

[ Vide Part. i. Book iv. Chap. i. Sect. ii. ]

### N U M B. I. C A S E S I. II. and III.

**I** ATTENDED and delivered an officer's lady of her first child. The labour was safe and easy; but I was surprized when I visited her next day, to find her up and dressed. I entreated her to undress and go to bed, that she might get into a breathing sweat as soon as possible; and I enlarged upon the bad consequences that would follow this misconduct. She had heard at second hand from gentlemen in the army, of women delivered in the camp, and on a march, who nevertheless recovered very well; and she declared, that as she was resolved to follow the camp, she designed to use herself to that way of life. I told her, that although some might escape in cases of extreme necessity, yet many no doubt had suffered on such occasions; and I observed, that women used to hard labour, and the inclemency of the weather, would suffer less than those who were bred more delicately. About an hour after I left her, she was taken with violent pains in the abdomen, and a cold shivering; on which the nurse undressed and put her to bed. She then gave her some warm caudle, covered her with a heap of clothes, and sent for me. By the time I arrived she was thrown into a plentiful sweat, and the pains had abated. I desired the nurse, when the pains were entirely gone, to take off some of the superfluous clothes; but to continue enough to keep her in a breathing sweat. This management of the nurse prevented any bad accident, and the patient recovered very well; but was so afraid, that I could scarce persuade her, even after the ninth day, to get out of bed.

A soldier's wife, told me that she was delivered of a child in a wood at Dettingen, in time of an engagement; after which she was carried in a cart with others, in a rainy night, several miles. By the cold and fatigue she was thrown into a fever, and became delirious for some days;

days; yet recovered, though with great difficulty. *Vide* collection xxxiii. N<sup>o</sup> ii. case x.

In the beginning of my practice, I was sent for in a cold frosty night, to a poor woman at some distance in the country, who had been safely delivered. As she was excessively cold all the time of labour, from the badness of the house, the want of clothes, and necessaries of life, I gave her husband some money to go to an ale-house at a mile distance, and bring from thence something comfortable. I left directions with the midwife to get her warm as soon as possible. The fellow got drunk, and did not return for several hours. I was told afterward that the cold and shivering continued, and the poor creature died next morning. Indeed, as there was little or no fuel for fire, both the midwife and I caught severe colds; for it was a lone house, and at a distance from any inhabited neighbourhood.

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*CASES IV. and V.—The effects of hot air.*

SOME years ago, when the summer was uncommonly hot in London; I was called to a patient in labour. There was a fire in the room, which was so hot and suffocating, that the woman and attendants, and myself, were scarcely able to breathe. I immediately ordered the fire to be extinguished, the windows and door of the room to be set wide open, and some of the clothes to be taken off the bed. The ignorant nurse had demanded a fire to warm the clothes or clouts, and put as many blankets on the bed as were used in cold weather. As she imagined warm and nourishing things were best, she had also mixed plenty of wine and spicery in the caudle.—When I examined, I found the labour pretty far advanced; but my patient was very hot, having a quick full pulse, accompanied with a great drought.—Being afraid of the bad consequence of these violent symptoms, I immediately ordered twelve ounces of blood to be taken from her arm; and directed her to drink barley-water acidulated with juice of lemon. The symptoms abated, and she was safely delivered about an hour after my arrival. The discharges being in a sufficient quantity, I ordered her to be kept quiet, and to drink plentifully of barley-water without the lemon. The room being now pretty cool, the window was shut, but the door left open. Next day, as it was still scorching hot, I ordered a window toward the north to be kept open, some mallows were strewed in the room, and placed on the tables and drawers; flowers were set in pots, and these were sprinkled every now and then with cold water. The patient being still hot and dry, and the pulse a little quick, I desired her to continue the barley-water for drink, and also to take between whiles some water-gruel, with a very little white-wine, and toasted bread, for nourishment. By this method the fever was abated, and she recovered better than I expected.—During the same tract of hot weather, I attended several patients in labour; and the same cautious methods being used they all recovered. I remember, by way of precaution, I ordered each of them to lose about six or eight ounces of blood, to keep moderately cool, and take a light diet, more or less, according to their different constitutions; these measures served also to prevent profuse sweats, such as happened in the following case.



## C A S E IV.

**W**HEN I lived in the country, I was called to a woman on the fourth or fifth day after delivery of her first child. The weather was hot; by which, and too hot a regimen, she was thrown into profuse sweats. The discharges had been in the usual way for the first two days; but now were entirely stopped, and her breasts quite flaccid; both the milk and discharges seeming to be carried off by the excessive sweating. Her pulse was low, and her spirits were much sunk. I called in another gentleman in this uncommon case. We ordered small quantities of the spir. mindereri, with nitrous medicines, and a nutritive diet. Her body and extremities were firmly compressed with linen waistcoats and rollers; but all was to no purpose; she at last grew comatose about the ninth day, and expired.

## NUMB. II. CASES I. and II.

*With respect to eating and drinking.*

**I**T is really surprizing to see the follies of ignorant midwives and nurses in their opinion about eating and drinking; from the excess of which many poor women have lost their lives. I was called by one of the first-rate midwives, to see a shop-keeper's wife whom she had delivered the night before. I found her pulse quick; she had enjoyed little or no rest, and complained that she had an uneasiness and load at her stomach. The midwife told me that she had eat nothing but her chicken; and that was her usual way with all her women, to fill up the emptiness in her bowels, and keep the wind out of the stomach. I found the patient was naturally of a delicate constitution; I said nothing then, but ordered her to drink frequently a little barley-water instead of strong caudle, and prescribed an emollient clyster, and these had the good effect to empty and assist digestion. I afterward argued privately with the midwife on the subject; and she was convinced, from what had happened, that the complaint proceeded from the patient being forced to eat against her inclination. I told the midwife, that the method might do with some who had a good appetite; and indeed some of my patients have complained of being excessively hungry after delivery; and these I have allowed to eat more or less of a chicken, or of other food of easy digestion, and they were not the worse; but to those who had no such craving, I found caudle and broth with bread were better, and sat easier on the stomach.

Errors are also frequently committed in the article of drink. Many midwives imagine, that women in labour, and after delivery, ought to have strong cordials to assist and support them; such as strong waters distilled from spices and spirits, together with brandy and wine. I shall give one fatal instance of a case of this nature, which may be sufficient to deter midwives from such practices. Many years ago, I was called in the country to a friend of my wife's, who had been safely delivered about three days. When I arrived, they told me she had been in a great fever, and had violent pains in the abdomen for two days; but that now she was much easier. I enquired particularly, and found that during labour, and ever since, her drink had been mostly warm punch, three parts water, and one of brandy. She had an intense heat on the skin of her arm, her pulse was weak, low, and intermitting. The pains, from being violent, were suddenly abated, and indeed quite gone. I then told her friends, that far from being better, she was in the most imminent hazard of her life; that there had been

a violent inflammation of the uterus, and that the pains abating on a sudden plainly indicated, that an incurable mortification was come on, and as her pulse had begun to intermit, she would soon grow delirious, and die in a few hours. My prognostic was verified, to the surprize of all present.

### N U M B. III. C A S E S I. II. and III.

*Relating to sleep and watching.*

**I**T was formerly counted dangerous to allow women to sleep immediately after delivery; but for my part, I always found it of great service to keep them quiet, as soon as they were placed right in bed. A patient whom I had delivered, after a tedious labour, inclined to sleep; but the nurse and attendants resolved to keep her awake, by reading old romantic stories. I told them that any danger from sleeping, could only exist when there was a violent flooding; but as that was not the present case, it was a pity to balk her inclination. However, as they were so much afraid, I promised to stay by her with the nurse. She accordingly slept sound for two hours, and was much refreshed when she awoke. I have had many such battles with the assistants, but always found that the sooner the patient fell into a sleep, the better she recovered; and indeed, whenever they could not procure natural sleep, and their pulse was not very quick, I always ordered an opiate.

I was called by an apothecary, to a patient who had been delivered the day before. She had got no rest, and complained of great pains in her bowels, which did not seem to be after-pains. It was her first child. She had no stoppage of urine, or symptoms of a fever. She begged of me, if possible, to relieve her; but at the same time not to give her any preparation in which there was opium. I told the apothecary, that as the pains were so violent, nothing else could relieve her. He said that opiates did never agree with her in her former complaints, or make her sleep when restless. I answered, that I wanted only to ease the pain, and after that she would sleep of course, and that we must deceive her. I ordered a draught with 30 drops of the tinct. thebaic. I called next morning, and found her free from pain. She had enjoyed good rest, and said that she had been in Heaven ever since she had taken the medicine. I have had many instances of the same kind, when opiates were administered properly, as mentioned in the latter end of part i. However, I have had also some few patients who were not in pain, but could not rest, and opiates did them no service, as in the following case:

I attended another apothecary's wife in her first child. She was every way safe and easy after delivery; but could not sleep. I ordered a gentle opiate, which had no effect; but instead of composing, gave her a giddiness, and presented many spectres to her imagination, particularly the witches in the tragedy of Macbeth. I then ordered a bolus of pulv. castor. gr. v, and sal. vol. cor. cervi, gr. iij, to be taken and repeated occasionally. This had the desired effect, by which she got good rest; and it was the only remedy that procured sleep in her succeeding deliveries.

### N U M B. IV. C A S E S I. II. and III.

*Relating to motion and rest.—Vide No. i. case i. of this collection.*

**A** WOMAN of a healthy constitution, who had been delivered twice in the country, came to live with her family in London, when big with child. I was bespoke to attend her, and she was safely delivered. I

visited her the second and third day, and found every thing in a good way; but was surprized, when I called on the fourth, to find her up, and in her common drefs. She told me that she had fat up the evening and night before, and played at cards, and was to dine with the family; that she had done the same after her former labours, and recovered much better than those who lie in bed. I exclaimed against that practice, and told her that I had been called often to patients who had been thrown into violent complaints by getting up too soon; and I was afraid she might suffer sooner or later by being too forward. However, she persisted in her old way, and recovered exceeding well; but the next time I delivered her, she was on the fourth day taken with violent pains in the lower parts of the abdomen, which threw her into a violent fever. As I was engaged with another patient, I did not see her till they sent for me on the sixth, when I found the pains and fever excessive. She was immediately bled. Dr. Shaw was called, and we ordered draughts with the sal. absinth. and suc. limon. also the common emulsion with nitre. She grew delirious, the pain went off suddenly on the seventh, and she died the same night.—*Vide* N<sup>o</sup> ii. case ii. of this collection.—One would be apt to imagine, that this fatal catastrophe happened from her constitution altering, and becoming more delicate by a city life.

A poor woman in St. Giles's was delivered by Mrs. More, and some of my pupils, who gave her some money; which being soon spent in gin with her gossips, she went out begging with her child on the fourth day after delivery, was taken with violent pains and a fever that night, and with great difficulty recovered by bleeding and antiphlogistic medicines.

A poor woman of a strong constitution was delivered by us three times, and escaped without any complaints, though she was out in the street begging with her child, and singing ballads on the fourth or fifth day, with a man's coat on her back.

I could give many instances in which robust women, and those who have been bred hardily, will recover surprizingly; and also of such as are more delicately brought up, who, from a very small error in management, will be brought into great danger; but these are sufficient to illustrate what I have published in the first part of this work on that subject.

#### NUMB. V. CASES I. II. III.—*Obstructions of urine.*

**I** WAS called by a midwife to a woman in the Hay-Market. The membranes had been broken many hours, and the head presented. She complained of great continued pain at the lower part of the abdomen, and it increased in time of a labour-pain, which obliged her to restrain the last as much as possible. After informing myself of every thing relating to the patient, I found she had made no water for many hours, from which circumstance I concluded, that the foregoing pain must proceed from too great a distension of the vesica urinaria. I said nothing to the woman, but bid her take courage, and told her that I hoped soon to relieve her. As she lay on her side, I tried to introduce the catheter under the clothes; but as she shrunk from me, I was obliged to take the assistance of the light of a wax taper, and drew off a large quantity of water. The pain immediately went off, and she was delivered soon after. I have had several cases of the same kind, in which the women were relieved in the same manner. Sometimes I could introduce the catheter without inspection; but if I found it not easily performed, I chose the former method, to prevent hurting and inflaming the urethra.



I was called to a little decrepit patient, on the fifth day after delivery. The labour had been tedious, and she had passed urine several times, but with some difficulty. At last it had stopped for about twelve hours, and she was in great pain. The catheter passed with difficulty, from the parts being inflamed. She was relieved on the discharge, but the obstruction returning, I was obliged to repeat the operation several times, and at last there was a large discharge of pus from the urethra. This reduced the swelling, and carried off the pressure on the urethra, which obstructed the passage of the urine.

I was called to a woman who had been, three hours before I came, delivered of her first child. She complained of excessive pain in the abdomen. I enquired of the patient if she had made water during labour, and she told me she had made great quantities. I examined the abdomen, and found there was not another child, and the nurse told me that the placenta was all come off: I ordered an opiate, in hopes that it would relieve the pain, and called next morning. The patient was still in great pain, and had got no rest all night. I then said I was surprized that the complaint was so obstinate, especially as she had passed so much water in time of the labour, and enquired if she had made any during that night. The midwife told me that she was certain she had made no water all the time of her labour, which was very tedious, and that she had passed none since. I then found the patient had mistaken the waters from the uterus for her urine; and that all these pains proceeded from the distension of the bladder. I immediately drew off a large quantity. She said in time of the operation, when not above a pint was drawn off, that now she was as if in Heaven, by being free from pain. I have had many such cases, in which I was obliged to draw off the urine several times before the patient could make water; but unless they were in great pain, I always waited to try what nature would do, sometimes to the third, or even to the fourth day, especially if they sweated much.

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*C A S E IV.—Costiveness.*

**I**T is a great happiness, if patients are costive before delivery, that the child's head, as it is pressed down to the lower part of the pelvis, forces down before it the hard excrements which are contained in the rectum, by which means the patient has a plentiful stool. I have had many patients, however, who wanted relief about the fourth or fifth day after. This was easily accomplished by laxative medicines, or suppositories and clysters.—I was called to a woman who had been without passage from her delivery to the seventh day. She had great strainings, but to no purpose. A clyster was tried to be thrown up, but it could not pass. A suppository was used, without producing the desired effect. About four spoonfuls of warmed oil were injected, which brought off some hard faeces: this gave room for another clyster, which relieved the patient.

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*C A S E S V. VI. and VII.—Purgings.*

**A** WOMAN was delivered all on a sudden in the seventh month. She was costive, and the child passed so easily, that she had no stool at delivery. As she was next day uneasy on that account, I desired the nurse to administer a clyster of water-gruel with a little oil; without my knowledge she had put in a large quantity of salt. This gave her a passage; but  
at

at the same time brought on a violent purging, which weakened her excessively; but at last it was stopped by repeated opiates.

I was called to another to whom a clyster of the same kind had been given soon after delivery, which brought on such a violent purging as exhausted her strength, and carried her off in five or six hours, notwithstanding all the common methods were used to relieve her.

A woman, about the 18<sup>th</sup> or 20<sup>th</sup> day after delivery, when she seemed out of danger, was taken all on a sudden with a violent purging, which immediately sunk her very low; this was soon checked: but then her legs began to swell. Her stomach also nauseated all food. Being called to her assistance, I declared her in great danger; and advised the friends to take the advice of a physician, as it was not now my province to prescribe. Dr Mead visited her next day, and ordered medicines to invigorate the body, by quickening the circulation of the blood, and contracting or strengthening the fibres of the bowels, such as *confect. cardiaca. aq. cinnam. &c.* Nevertheless the languor continued, and the swelling in her legs increased with violent pains in them. At last the lower part of the belly and right side swelled excessively; and she died about six weeks after delivery. *Vide col. xxxiii. N° ii. case vii.*—I could give more cases of costiveness and purgings; but I refer the reader to the directions in part i.

#### N U M B. VI. C A S E S I. and II. *Passions of the mind.*

**I** ATTENDED a patient the night a fire happened within a few houses of the disaster. The labour went on exceedingly well, and we kept her from the knowledge of the accident until we had taken measures for her safety, by having a chair in waiting, and a room prepared in a friend's house. At last the noise alarming her, I told her the affair, and that it was at a distance; she seemed satisfied; yet the pains immediately ceased. And although the fire was extinguished, yet the pains did not return till some hours after, when she was soon delivered, and recovered tolerably well.

I was called by one of my old pupils, who with an old midwife was attending a patient pretty much advanced in years, in labour of a first child. Every thing was in a right way for a safe delivery; but as the case was tedious and lingering, both the woman and her friends were impatient, and had sent for an old blundering pretender in the neighbourhood, who told the patient, that she was in the utmost danger, if she was not immediately delivered. He said he hoped he could save her life, but the child was dead already; and he called in another midwife, who confirmed what he asserted. The woman's pains had been vigorous; but these dismal accounts frightened her so much, that when I arrived they were quite gone off. After conversing with the patient, we (all five) went to another room where the parties began to quarrel: I called the old blustering practitioner aside, and told him my opinion, that the woman was in no danger; but by time and patience I hoped would be safely delivered. Nay, I threatened to have him called before the college if he insisted on any violent operation: then he quitted the house with his associate. After this departure we had time to soothe and encourage the woman. As she had got little sleep we gave her a draught with 30 drops of the tinct. thebaic, and the midwife delivered her safely next day.

## COLLECTION XLII.

[ Vide Part i. Book iii. Chap. i. Sect. iii. and iv. ]

NUMB. I. CASES I. II. and III.—*Floodings:*

**I** ATTENDED a woman in a tedious labour, who was at last safely delivered. A large discharge of blood followed the placenta, which did not abate as usual; but continued so as to sink her spirits, and endanger the patient's life. Her countenance turned pale; and her pulse became low. I immediately gave her 15 drops of liquid laudanum, and applied cloths dipped in vinegar to the pudenda. The discharge diminished; but continued to flow rather faster than I judged was safe in her weak condition. I gave her five drops more in about half an hour after the first, which had the desired effect, by throwing her into sleep, and restraining the flooding. She recovered tolerably well. The next time she happened to be in labour, she was excessively afraid of being in the same condition, and begged I would order the same medicine by way of prevention. When I found the labour pretty far advanced, and the os uteri dilated by the membranes, I gave her 20 drops of the laud. liquid. and before the delivery she began to doze a little betwixt the pains. She was soon delivered, and had a moderate discharge, which gradually abated. She afterwards fell into a sound sleep, and recovered very well.—I have had many such cases, in which I always found this method the most successful, when called in time, and when the vessels were not too much emptied.

A woman whom I had safely delivered, after a tedious labour, seemed to be in a good way, but of a weakly constitution. In about an hour after they sent for me. I was told by the nurse, that when moved to place her right in bed, she was taken all on a sudden with a violent flooding, so that it ran over the bed to the floor. I ordered cloths dipped in vinegar and water, wrung out, to be applied; but while I was dropping some tinct. thebaic. into a cup with wine and water (the draught not being yet come from the apothecary's) she fell into another fainting fit and expired. Such fatal accidents seldom happen, except in extreme weakness of constitution, or from great floodings before, and in time of delivery. I regretted that I had not given her an opiate in time of labour, which I have since found from experience to be the best method, to secure the patient from being attacked by such fatal discharges.

I was called by a gentleman, to assist in a case wherein the patient was in time of labour attacked with a flooding, occasioned by part of the placenta being detached from the uterus. He had given her repeated restringent draughts, with five drops of tinct. thebaic. in each; but as they had procured no inclination to sleep, I advised him to give her a simple draught with tinct. thebaic. gr. xx. This soon had the desired effect; she slept sound between every pain, the flooding abated, and in a little time she was safely delivered. *Vide Lamotte, book v. chap. iv.*

NUMB. II. CASES I. and II.—*Relative to after-pains.*

**B**EING called to a woman soon after delivery, who was in great pain at intervals, and imagined she had another child to bear, I examined and felt the os uteri contracted; the uterus indeed felt larger than common when I examined the abdomen, but not so much as to induce one to believe it contained another foetus. The midwife and nurse assured me that the placenta came off without any violence. I ordered a composing mixture

with



with 30 drops of the tinct. thebaic. one half to be given presently, and the remainder by degrees, as there might be occasion to relieve the pains and procure rest. This was in the morning, and the weather was excessively cold. I called again in the evening; she was still in pain, but had dozed a little. She complained much of the coldness of her feet. I ordered hot bricks wrapped in flannel to be applied to the soles of her feet and the small of her back, which was affected with a chiliness. I also desired the nurse to put more clothes on the bed, and give her some caudle as hot as she could drink it. She had taken all the mixture, and I did not chuse to order any more, being in hopes that this method would throw her into a plentiful sweat, which would relax the fibres, and assist nature to discharge the coagulated blood, or carry off the spasms that might be the occasion of such violent after-pains. Next morning when I visited her, the nurse told me, that soon after my directions were followed, the patient fell into a profuse sweat; a very large coagulum was discharged, the pains went off, and she had a good night's rest.

I attended a patient, whose child and placenta were delivered expeditiously and safely with a few labour-pains; but soon after that she was attacked by severe after-pains. I ordered a composing mixture, as in the former case, to procure a breathing sweat as soon as possible. She got some rest, fell into a gentle diaphoresis, and some small coagula were discharged. When I repeated my visit in the evening, the violence of the pains still continued; yet although she had not slept, she had undergone a gentle perspiration, and her pulse was become more moderate. I then prescribed a simple draught with tinct. thebaic. *gt. xx.* the pains abated in the night, but returned in the morning, and grew more violent in the evening. The last draught was again repeated, and administered the night following. The pains went entirely off on the fifth day, without any more clots of blood being discharged. Of these two cases, the first seems to have proceeded from coagulated blood, and the last from periodical spasms or irritations; for the common discharges were in the usual proportion. I have had many such cases; but seldom any so violent.

## COLLECTION XLIII.

[Vide Part i. Book iv. Chap. i. Sect. v. and vi.]

N U M B. I. C A S E I.

*The lochia obstructed in a woman delivered by Mr. Mudge.*

[Vide Collect. xviii. N<sup>o</sup> vi. Case iii.]

**H**E ordered her, after delivery, to take some of the nervous medicines. He was informed next morning, that she had none of the fits; but she seemed to be in a comatose state. She had taken the medicines two or three times; but continued in much the same way, till toward evening, when she grew more sensible and spoke. As she would not take caudle, he ordered mutton-broth. When he called next morning, he was told she had rested little all night, that the lochia had stopped, and the patient was delirious. He prescribed a fatus for her belly, and *ʒj.* of pulv. troch. de myrrh. About noon the delirium increased, and her pulse grew very high; he then bled her largely at the ankle, and applied a blister to each leg. An emollient clyster was injected with the addition of 30 drops

of ol. succin. and he directed that she should swallow a slight anodyne draught after the operation of the clyster next morning. He found her quite insensible. Her pulse, however, was more moderate; she had no discharge with the clyster, but had made water plentifully. The blisters rose well; but as there was not the least appearance of her lochia, he ordered her to take the same quantity of the troch. de myrrh. with the former nervous mixture, every eight hours. The abdomen all this time was unattended with tumour or induration, or any other symptom that indicated the least tendency to inflammation. In the evening she seemed rather better, at night much mended, and she slept tolerably well. Next morning he found the fever entirely gone off, though she still rambled in her discourse. In this way she continued near a fortnight, having no manner of fever, till at last by imperceptible degrees she became more sensible; but the disorder left a pain in her head, which she did not lose for some time. He observes, that the delivery was the only expedient for carrying off the convulsions, and that he had a case eight months after, wherein the lochia stopped in about eight hours after delivery, without ever returning, although he used all the means he could contrive to bring back the discharge, yet the suppression was followed by no bad symptoms of any kind.

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### C A S E II.

*Obstruction of the lochia, from Mr. Mudge, Plymouth.—Collect. xxxv.  
Supplement to Case xv.*

**A**BOUT six hours after delivery the lochia stopped; the pulse was very quick, and the countenance florid; the pain and tension of the belly increased. She had some disposition to sweat; but could not be induced to keep her hands covered to encourage the diaphoresis. He ordered ten ounces of blood to be taken; a fomentation in a hog's bladder to be applied to the abdomen; an emollient clyster to be injected, and one ounce of ol. amygd. to be taken once in six hours; but all was to no purpose; the abdomen swelled, the pulse grew small and quick; the extremities cold and clammy, the uterus no doubt mortified, and the woman died in about 30 days after delivery. She had, it seems, three weeks before delivery, exerted her strength beyond measure.

Mr. Mudge observes, that he has been called to twenty preternatural cases among poor women, for every four he has attended among persons of higher rank; and thinks this difference may proceed from the poor being more liable to accidents in consequence of hard labour, and the various risks they run.

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### C A S E III.

*Management of a patient after delivery.*

*Brought from Collect. xxxiii. Case xvi.—Mr. Ayre.*

**W**HEN I called (which was the third day after) I found her pulse low and quick, attended with a great drought, her skin dry and hot. She had the evening before taken one of the boluses and draughts, had slept little, and her slumbers were much disturbed and broken. She complained that her head was pained and giddy; a circumstance, which, as she was so weak, I imputed to the opiate, which was scarce half a grain. She told me that no kind of sleepy medicines ever agreed with her

constitution. I ordered her to be kept as quiet as possible, to drink frequently of barley-water to assuage her thirst, with now and then a little caudle; and at the same time prescribed the following draughts to promote a diaphoresis, and a better discharge of the lochia.—*Rx* pulv. contrayerv. gr. xxv. Castor. opt. salis suecini,  $\bar{a}$  gr. v. *Aq.* cinnamom. simp.  $\bar{z}$ ij. Sacch. alb. q. f. f. haust. 6, quaque hora sumend.

4. She had got better rest this night, and there was a larger discharge of the lochia; but the pain of her head continued; she also complained of pain in the lower part of her belly, with difficulty in making water; but on examining, I found her belly soft, no swelling on the external parts, in the vagina, or the os internum. She had not sweated; and her skin was dry and hot, with a quick low pulse as before. In these circumstances I thought proper to proceed in the middle way, neither to order any medicines to raise the fever too high or sink her too low. She was prescribed the following:—*Rx.* sal. absinth.  $\bar{z}$ ss. Suc. limon.  $\bar{z}$ ss. *Aq.* alexit. simp.  $\bar{z}$ iss. Pulv. contrayerv. comp.  $\bar{\theta}$ ss. Sacch. alb.  $\bar{z}$ ss. f. haust. 6, quaque hora sumend.—*Rx.* *aq.* cinnamom. simp.  $\bar{z}$ ivss. Alexit. spirit. cum aceto.  $\bar{z}$ j. Syr. caryoph.  $\bar{z}$ ss. *M.* sumat. coch. ij. in languor.

5. The above were continued, and a cerate was ordered to soften and relax the hardness and pains of the breasts.—*Rx.* sperm. ceti,  $\bar{z}$ ij. Ol. amygd.  $\bar{z}$ ij. Ceræ alb.  $\bar{z}$ vj. Fiat cerat. extend. super alut. mammis applicand.—Her breasts were also sucked with glass pipes, but would yield no milk. All along she got but little sleep; her skin grew hot and dry, she had a great drought, and drank plentifully of weak caudle and barley-water. She complained of pains in her stomach and head; her pulse was quick and very low. The lochia were moderate. As she was weak, and had a sufficient discharge of blood at her delivery, I durst not venture to order bleeding, although she had a difficulty or oppression in breathing; neither would I venture to order opiates internally, but prescribed the following epithem:—*Rx.* ol. caryoph.  $\bar{z}$ ss. Theriac. androm.  $\bar{z}$ ij. *M.* pro emp. region. stomach. applicand.

6. Finding all the complaints increased, and also the lochia much more diminished, I advised calling in more assistance; when Dr. Wasse was sent for, who ordered the following:—*Rx.* pulv. e chel. cancr. gr. xv. Croc. pulv. gr. iv. Syr. bals. q. f. f. bol. hac nocte sumend. cum haust. sequent.—*Rx.* sperm. ceti,  $\bar{\theta}$ i. Solv. in vitell. ov. q. f. lac. ammon. elix. asthmat.  $\bar{a}$   $\bar{z}$ ij. *Aq.* alexit. simp.  $\bar{z}$ jss. Syr. bals.  $\bar{z}$ ij. f. haust. repetatur eadem bolus mane cum haustusequent.—*Rx.* sperm. ceti,  $\bar{\theta}$ i. in vitell. ov. solut. *aq.* alexiter. simp.  $\bar{z}$ iss. theriac.  $\bar{z}$ ijj. Lac. ammon. syr. bals.  $\bar{a}$   $\bar{z}$ ij. *M.* f. haust.

7. Her looks were wild, her sleep was disturbed; and she had all the symptoms of a beginning delirium.—*Mitr.* sanguis e brachio ad  $\bar{z}$ ix. statim. *Rx.* sperm. ceti,  $\bar{z}$ ss. solut. in vitell. ov. q. f. ol. amygd. d. syr. ex althæa,  $\bar{a}$   $\bar{z}$ ij. Sal prunell.  $\bar{z}$ ss. Aqua alexit. simp.  $\bar{z}$ iss. Sp. c. c. gutt. vij. f. haust. quarta quoq. hora sumend.—*Rx.* decoct. gum. arab. in aqua hordeat fac.  $\bar{\theta}$ ij. f. emuls. ex amygd. dul. & sem. 4. frigid. sal prunell.  $\bar{z}$ ss. Syr. dialth. q. f. m. bibat pro potu tepesact.—She grew delirious, her skin was dry with an intense heat, the pulse quick and low, difficult respiration, the lochia entirely obstructed, had sometimes violent pains at the os externum, but no swelling or hardness of the belly, or on these parts.

8. She had cooling clysters injected, which operated; such as decoct. commun. pro. chem.  $\bar{z}$ ix. Sal. Glaub.  $\bar{z}$ j. Ol. oliv.  $\bar{z}$ iv. Syr. rosar. solut.  $\bar{z}$ iss. f. enema statim injiciend.—The draughts and emulsions were continued;



nued; and the following were prescribed:—*Rx.* sal. absinth.  $\mathfrak{z}$ j. Suc. limon.  $\mathfrak{z}$ ss. Aq. alexit.  $\mathfrak{ss}$ . cum aceto,  $\mathfrak{z}$ ss. Simp.  $\mathfrak{z}$ iss. Pulv. c. chel. cancro.  $\mathfrak{z}$ j. Sal. prunell. gr. xiv. Syr. croci,  $\mathfrak{z}$ ijj. f. haust. 6ta quaq. hora sumend. appliceter vesicator. inter scapulas.

9. The delirium increased with all the other symptoms, and seemed now to be a nervous fever. There was no hardness or inflammation about the uterus or hypochondria; the draughts and emulsion were continued, and the following ordered:—*Rx.* aq. alexit. simp.  $\mathfrak{z}$ vj. Alexit. spir.  $\mathfrak{z}$ iss. Tinct. valerian. volatil.  $\mathfrak{z}$ iss. Margarit. p. pt.  $\mathfrak{z}$ i. Syr. bals.  $\mathfrak{z}$ ss. f. julep. cap. coch. ij. vel iij. in languoribus.

10. She was now much weaker and insensible, with a tremor of the tendons; the pulv. contrayerv. comp. was added to the draughts.—*Rx.* pulv. c. chel. c. comp.  $\mathfrak{z}$ j. Sal. succin. vel croc.  $\bar{a}$  gr. iv. Confect. Raleigh.  $\mathfrak{z}$ ss. Syr. croc. q. f. f. bolus 6ta quaq. hora sumend. cum coch. iij. Julep. seq.—*Rx.* aq. cinnam. alex. simp.  $\bar{a}$   $\mathfrak{z}$ ijj. Aq. n. m.  $\mathfrak{z}$ ijj. Sp. sal. vol. ol.  $\mathfrak{z}$ j. Margarit. p. pt.  $\mathfrak{z}$ ij. Syr. croci,  $\mathfrak{z}$ ss. Cap. coch. iij. in languor. repet. enema. applicetur vesicat. collo ad utrumque latus, pone aures usque ad claviculos.

11. Blisters were applied to the arms, and the other cordial medicines continued, with the addition of the pectoral decoction. Two plasters as follows were applied to the feet:—*Plantis pedum emp. ceph. et emp. vesicator.  $\bar{a}$  part. equal.* She died on the twelfth day after delivery.

The above journal is inserted to show the formulæ of prescriptions used in such extraordinary cases. But those medicines are not to be prescribed indiscriminately by young practitioners, without proper advice of the more experienced,

## NUMB. II. CASES I. II. III. and IV.—Complaints from milk.

**A**PATIENT after the delivery of her first child attempted to suckle the third day, but the child would not fix its mouth to the nipple. The nurse told me she had no nipple. I examined, and could not observe any thing but the seeming vestiges where they ought to have been. The woman confessed, that when a young girl at boarding-school, she and her companions had imagined them to be warts, and pulled them off. She was obliged to give up the suckling; but the breasts being turgid and painful, I ordered a pulv. of bread and milk to be applied; and endeavoured to procure a breathing sweat. Next day she was easier; she had sweated excessively; her breasts were softer, and although the nipples were gone, the milk had run out, so that the pulling off the nipples had not entirely obstructed the ducts. She complained of an itching and roughness about her neck and arms; and on inspection, I found them to be of the miliary kind. She had got up, and the sweating was gone off. I ordered her to bed, and to drink some of her caudle, and keep in a gentle breathing sweat. About the seventh day she had three loose stools, which carried off the milk without having any bad effect. The next time I delivered her, she tried again to suckle the child; which fixed so effectually on the parts, that it actually formed large well-shaped nipples, and she nursed that and two more.

I delivered a woman of her first child, who tried to suckle, but could not get the child to take the nipple; they were very small, and the child very weak. Her breasts grew hard, were fomented, and cataplasms applied. She was kept in a gentle breathing sweat. A nurse was procured

who had a stronger child, who suckled the patient while the nurse suckled her child; by this method the breasts were gradually emptied, and she recovering, afterward suckled her own child.

I attended another patient much in the same condition; the same method was used, but to no purpose. One of the breasts ran out, but the other inflamed so that an impostume was formed; this was opened, and discharged so great a collection of matter, that it weakened the patient, and threw her into a hectic fever, but she recovered, by going into the country and drinking asses-milk.

Another woman had received a blow on one of her breasts, a little before she was delivered, which occasioned a swelling and hardness. After delivery, she tried to suckle, but could not in that breast. Every method was tried to discuss the tumified glands, but to no purpose. The swelling grew larger and harder, the inflammation increased, and turned cancerous, and at last destroyed the woman.

## COLLECTION XLIV.

[ Vide Part i. Book iv. Chap. i. Sect. vii. and viii. ]

### CASE I.—Of a prolapsus vaginae.

**T**HIS misfortune happened to a woman soon after a tedious labour; a round middle-sized pessary was introduced, and turned so that the lower edge rested at the lower and back part of the vagina, betwixt the os externum and fundament, while the upper edge was supported against the inside of the os pubis; the mouth of the womb lay against the lower edge of the round hole of the pessary; this kept up the uterus and vagina, and relieved the complaint. Two or three months after, she fell with child; and when five months gone, the pessary was taken out, because it was thought needless to keep it there any longer, especially as the uterus was so large as to be supported by the upper part of the pelvis. The pessary, instead of lying in the same position as when first introduced, was found lying up along the back part of the vagina, which it kept up; and the mouth of the womb hung down on the fore part of the pessary. This circumstance gave the first hint, that a pessary introduced, and laid in this position, was the best method for keeping up the uterus; for if the vagina is kept up, the uterus must in consequence be kept up also. The upper part of the vagina is attached round the lips of the mouth of the womb; and as the uterus naturally sinks down into the vagina, one great advantage to married women is, that this method does not hinder them from cohabiting with their husbands. After the pessary was withdrawn, the prolapsus of the vagina returned, and occasioned the former uneasiness. It was again introduced, and laid up along the back part of the vagina, as in the last method, which kept up the vagina as before, until she fell in labour, and then it was forced out at the beginning of the pains. She was at last safely delivered. The vagina on the fore part, at the os pubis, was very lax, and came down before the head of the child; but by cautious management, it was kept up till the head came along, and then it was slipped behind the same. She recovered very well, and suckled the child.

### CASE I.—Of a prolapsus uteri.

**A** Middle-aged woman had a prolapsus uteri. She had been formerly delivered of a child or two at the full time, and after that miscarried twice, about the third month each. She again was pregnant; and

at the end of the second month, had a small discharge of blood from the vagina. She was bled, and kept her bed several days, by which it was restrained. The same discharge returned the third and fourth month; at first in large quantity, but the last very inconsiderable. Being called to her about the middle of the fourth month, I found her in violent pain. On examining, I found the uterus pushed entirely out of the os externum, bigger than a man's fist, occasioned by a violent fit of coughing. The vagina felt as if it was about an inch protruded before the os internum; and all the vagina appeared to be inflamed and swelled. I introduced my finger at the protrusion of the contracted vagina, which was just large enough to receive it a little way; but I could neither distinguish the os internum, or any substance contained in the uterus. It might have been the os internum opened, but of this I was uncertain: hence it seemed probable she was not with child. The prolapsus was reduced with some difficulty; two days after, a round middle-sized pessary was introduced, and fixed up along the back part of the vagina, so as that the upper part of the vagina and os internum hung down before it. She had before this period, for two or three months, a large discharge to the appearance of the fluor albus, and the uterus had prolapsed in that space three or four times; but being then smaller, she could easily reduce it herself. It being uncertain whether she was with child or not, it was resolved to order only a cooling regimen, with some saline draughts and nitrous medicines, till the next period. By these means the cough and discharge of the fluor albus were removed; she seemed perfectly easy, and was allowed to walk about in the house. At the end of the fourth month, she had, to appearance, a regular discharge of the menses; the mouth of the os internum felt swelled and more shut, which made it almost certain she was not with child. Being sent for about the middle of the seventh month, I found she had regular labour-pains; the os internum was so open, that the membranes, waters, and head of the fœtus, were regularly felt, and there was no discharge of blood. As the os internum, though a little open, instead of being thin or soft, felt thick and hard, it was adviseable to order first bleeding to the quantity of eight ounces, after that two emollient clysters, which discharged a large quantity of fœces, and then an anodyne draught was given of aq. cin. ren. & syr. c. meconio.—The salt of wormwood draughts were repeated with a cooling regimen, such as panadas, weak broths, emulsions with sal. nitri. and boiled chicken. The pains went off for 24 hours, after which they returned; the os internum now felt much more open and soft; the membranes were pushed down with the waters, and the fœtus was soon delivered; after which there was some discharge of blood. No violence was used to bring away the secundines. As the placenta separated from the uterus, the discharge increased, but not to any large quantity; and in three hours the secundines were forced through the os internum into the vagina. By pulling softly at the funis, and at the edge of the placenta with two fingers, they were easily extracted. She recovered very well. The child was very small, and reared with difficulty.

Mr Oakley, of Birmingham, relates a case of a prolapsus uteri, which could not be reduced, but mortified.—He says “I was called to a woman who gave me the following account of her case; that assisting her husband in lifting a weight that afternoon, she felt a lump fall out of her body. On which she sent for a midwife, who endeavoured to restore it into its place; but not being able, advised to send for me. Upon examination, I found the uterus out of the os externum, about the size of a large man's fist, and the glands



glands scirrhus. The patient was low, faint, and had but little pains. As reduction was impracticable, I directed emollient and discutient fomentations with pulvices; and after some days bled her in a small quantity, for she was too weak to bear the loss of much blood. Her body was kept open, and, when restless, quieted with opiates. Notwithstanding which, it increased in size, and after three weeks discharged a thin ichor from its whole surface, and in about six weeks the patient died."—The same gentleman requested my opinion about extirpation by ligature, which he thought might have been easily done, and which he proposed to the patient; but she would not submit to the operation. My answer was, that I could not resolve his question, as I never had any case in which it could not be reduced; but, no doubt, when a gangrenous appearance begins, and there is no hope of reduction, what he proposed should be attempted to save the patient's life; but such operations should have the concurring approbation of experienced surgeons; nor should it be undertaken but when the patient has strength, and the gangrene not advanced above the parts that are to be separated.

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C A S E III.—*Inversions of the uterus.*

MR. GIFFARD, in his cases of midwifery, p. 176, mentions a delivery in which the uterus was inverted, and drawn out beyond the labia pudendi, with the placenta adhering to it.—Mr. Chapman, p. 197, case 29, has a case also of the inversion of the uterus.—Mons. Lamotte, lib. 5, chap. 10, and 11, describes an inversion of the uterus and relaxation of the vagina,—I was called to a woman, who died before my arrival. I found the uterus inverted; pulled quite without the external parts, and the placenta adhering firmly to the fundus. This misfortune was occasioned by the midwife pulling at the placenta with too great force.

Mr. Lucas, of Pontefract, was called to a woman just delivered of a live healthy child, and found the uterus totally inverted, lying between her thighs, of the size of a large foot-ball. The pulse was weak and unequal, and there was a continued pouring forth of blood from the vessels of the uterus. He apprized the friends of the great danger of so deplorable a case. Nevertheless, with the approbation of a judicious physician, he undertook and succeeded in the reduction, afterward gave her gentle anodyne and cordial medicines, and left her in appearance better, and tolerably easy. In about half an hour he was again called, and found her speechless, the pulse imperceptible, clammy sweats, respiration deep and slow, and in a few minutes death closed the scene. All the parts were so lax, that the uterus had not the power of contraction; for it was lying like a loose piece of tripe, and taken for an excrescence, till he examined it more strictly, and after separating the placenta, reduced it into the abdomen,

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C A S E S V. and VI.—*Prolapsus of the rectum.*

THE hæmorrhoidal vessels of a woman were much tumified, painful, and forced out to a large size, in time of labour. After a pain was over I lubricated and forced them gently up within the sphincter ani; and kept them up with a thick compress with my hand applied against the part every pain; but when the head of the child was forcing down they were again protruded, with a large quantity of hard excrement; and it was impossible to reduce them till the child was delivered, when I again replaced them; but next morning, when she made water, they were again forced out;

out; on which I was sent for, and reduced them as before. As I expected this would happen every time she strained at stool, or in making water, I directed the nurse how to reduce them: she accordingly assisted her occasionally in this manner, till near the end of the month, when the swellings subsided, and the complaint went off.

I was called to a woman in whom the child presented wrong; but I delivered her with safety. Next morning I found the patient in excessive pain, which proceeded from the piles. When I examined, I found the lower part of the rectum pushed out, and so swelled that I could not reduce the parts, though lubricated. I then ordered a fomentation, composed of the emollient herbs, in which were mixed some vinegar and spirit of wine. After the fomenting and stuping, I again lubricated the parts with warm oil, and at last got them reduced, though with a great deal of force, and the patient recovered without another prolapse.

This case was a caution to me ever after, when the intestine was fallen down, always to reduce it; and after delivery, or if I felt no such complaint in time of labour, to examine these parts. This patient had been in great pain all night, so that she had all the symptoms of a violent fever. However, as she had lost an extraordinary quantity of blood in the delivery, and was relieved of the pains which occasioned these symptoms, the fever abated, and she recovered better than could have been expected.

## COLLECTION XLV.

[Vide Part i. Book iv. Chap. ii. Sect. i.]

### NUMB. I. CASES I. II. III. and IV.—*Imposthumes.*

**A** CHILD being delivered after a very tedious labour, the head had been moulded into an oblong form; and on the apex or crown there was a large tumour: this alarmed the mother. I ordered a compress, dipped in oil, vinegar, and spirits, to be applied and renewed every time the child's head was dressed, or three times a day. On the third day, I found a fluctuation, and ordered a pultice of bread and milk, with a little oil in it, and to be renewed two or three times a day. The tumour subsided, the fluctuation diminished, and was quite gone about the seventh or eighth day. I have had many such cases, which were generally in a few days discussed much in the same manner.

Another child, from the same cause, had a large tumour on the crown or apex: it had continued several days; an emollient cataplasm had been applied; it broke, and discharged a large quantity of bloody serum mixed with pus. The child was weak and low, and another tumour formed behind the ear, when I was called. The cataplasm was applied to that also; and as soon as there was a fluctuation felt, the tumour was opened with the lancet, which discharged a thin pus; but the large discharge of both reduced the child so low that it expired in a few days.—This was the only case that I have seen of this kind, and it made me careful afterwards of such complaints, so as either to try to discuss the tumour, or prevent the extravasated fluids remaining too long undischarged.

A child, on whose head a tumour of the same kind as in case i. was observed after delivery. The same methods were used; but the fluctuation did not diminish, and the hairy scalp began to feel thinner. About the  
sixth

sixth day, I made a small opening with the point of the lancet on the basis and back-part of the tumour, which discharged about a spoonful of a ferrous fluid. The tumour subsided. I applied a compress dipped in the mixture mentioned in case i. and by gentle pressure, the scalp and parts below joined or consolidated to one another.

A case of this last kind happened, where one of the gentlemen that attended me was called. He felt a large fluctuation, on which pultices of bread and milk were applied warm; but this method not succeeding, he had recourse to me. I advised him to make the opening as in the foregoing case, but to his great surprize, a large quantity of blood was discharged. He applied a dry compress and bandage to restrain the hæmorrhage; but it continued, and destroyed the child in a short time.—In my practice, I never had occasion to open above three or four of these tumours, and the expedient always succeeded; but this case rendered me more cautious in the sequel.—*Vide* a case in which the anus was imperforated.

Mauriceau, in page 213, and obs. 237, mentions having seen a child that had a great tumour on the upper part of one of the parietal bones, full of matter, which discoloured the skin; and recommends (in order to prevent the abscess) compresses of linen dipped in brandy, &c.

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#### N U M B. II. C A S E S I. and II.—Dislocation.

**I** DELIVERED a woman by turning the child, and extracting it by the feet.—*Vide* collect. xxxiv. No. ii. case x. page 208. Both mother and child appeared in a good way. Some months after, the father told me his little daughter was a fine child, but could not move one of her arms. I found the shoulder had been dislocated at the time of delivery. I tried several times to reduce it, but without success. This accident was owing to my not examining after delivery, when the limb might with ease have been reduced; and was a caution to me ever after, and should be to every one, to examine carefully every part of the child after such deliveries. This was the only luxation that ever happened to me in practice, where the child was alive.

I delivered a child, the soles of whose feet were turned inward. Mr. Sanxy, surgeon, was called, who contrived an effectual method, which reduced the inflexions at the ankles so well, as to enable the child to walk by bringing the soles of the feet to the natural position. His method was to bind down the soles of both feet with soft bandages, to one firm and straight or plain sole-piece of bend-leather, so that one foot was a stay to the other.

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#### N U M B. III. C A S E S I. II. III. and IV.—Fractures.

**I** N turning and delivering a small child by the feet, I found the bones of one of the arms snap asunder, though turned and delivered with great ease, and in a slow cautious manner. Indeed I am persuaded it happened principally from the smallness of the bone. I said nothing, but wrapped the child up in its blanket, and laid it on the lap of one of the assistants, desiring her not to move it till I had got the woman laid right in bed. I then examined the arm, and told the nurse it was a little hurt in the delivery, but would soon recover. As the child was poor of muscular flesh, I only applied a compress dipped in brandy and water, and with a single roller kept the ends of the bones together, which I found was sufficient at the time; and



to prevent suspicion of a fracture, I held the arm during the dressing. I desired the nurse not to let it lie on that side, nor undress the child till I was present. I renewed the dressings as there was occasion, and the arm recovered without the parents having any other suspicion than of a strain in the delivery.

Mr. Neale, surgeon, of the London Hospital, delivered a poor woman. The child presented wrong, and in bringing down one of the legs, the thigh-bone was broke. He bound up the fracture, and by great care, and frequent attendance, the limb recovered.

Mr. Web, of Nevis, went to deliver a poor woman. As the child presented wrong, he brought down one leg, but as the child was very large, he could not deliver the body, or bring down the other leg, on which I came to his assistance. In searching for the leg that remained in the uterus, I found the thigh bent downward and broken. This I delivered with caution, and after that the body and head. He bound up the fracture, and was at great pains to recover the limb, but by the mismanagement of a drunken nurse, the thigh inflamed, and the child died. Such things sometimes happen even to the best and most careful practitioners.

I was called to a labour in one of the lanes in St. Giles's, where the arm presented. The room was crowded with pupils to the number of 28. So many going in, had alarmed the lane; a great mob assembled, and began to exclaim that we were trying practices. On these accounts I delivered the woman in a hurry. The child was alive. I left one of the eldest pupils, who found that one of the thighs was broken; he tied it up, and attended frequently; but the child was lost by the carelessness of a drunken mother.

#### NUMB. IV. CASES, I. II. and III.—First dressings.

**I** DELIVERED a woman who had brought a nurse from the country. Next morning I was told the child was very bad. I examined and found it groaning, with scarce any pulse, the extremities growing cold, and the countenance pale. I desired the nurse to undress the child; and observed it was bound and pinned exceedingly tight. I stayed till I saw it dressed loose; and ordered a cordial mixture of aq. alexiter. simp. ℥ij. Aq. alex. spirituous, fyr. croci, ā ℥ij. a little of this to be given frequently. Next morning, they told me that the child expired soon after I left the house.—I have been called several times, where I found the uneasiness of the children proceeded from too tight dressings; and by observing this circumstance in time, the danger was prevented by dressing them looser. Doctor Sands told me he was called to a child of a relation of his own; and found it was so tight bound that it could scarcely breathe. The face was turning livid; and as there was no time to be lost, he ripped open the clothes; and the child was soon relieved.

I was called to see a child that heaved, and had an oppression at its breast. The nurse undressed it, and the clothes did not seem tight, but the bandage on the navel appeared very tight. This I ordered to be unrolled; and the child immediately breathed with greater freedom, and did very well.

The following is from Dr. George Macaulay:—A midwife made the ligature of the funis umbilicalis too near the child's belly. After several days it was shown to me; the ligature was not made so tight as to stop the circulation entirely, but the part was swelled and inflamed. I divided the ligature with a pair of scissors; the funis dropped off at the usual place, the inflammation abated, the parts contracted, and the child had a good navel.

## COLLECTION XLVI.

NUMB. I. CASE I.—*Imperforated anus.*

[Vide Part i. Book iv. Chap. ii. Sect. ii.]

**I** DELIVERED a woman of her first child; next day the nurse told me the child had had no stool, although she had given the oil and syrup; and was afraid there was no passage at the fundament, having tried to introduce a stalk of parsley and butter. I inspected the part, and lubricating my little finger, introduced it a little way into the anus; but plainly found a smooth obstruction about an inch or less from the entry. I informed the father of the danger the child was in, and advised him to send for Mr. Gattaker, the surgeon of the family; he advised, as the case was uncommon, to send for Mr. Middleton. They were of opinion with me, that it was right to try to make a perforation. For although the success was uncertain, yet if the attachment was slight, it might succeed. It was agreed to perform the operation with the trocar. Mr. Gattaker introduced the instrument, and pushed the point and sheath through the adhesion, in a line, as near as he could judge, along the common course of the rectum. No meconium appeared on withdrawing the instrument. After this he introduced a large bougie, which went up a great way. We, next morning, observed some meconium come down on extracting the bougie. Another somewhat larger was again introduced, and the child seemed to be in a fair way of doing well.

*CASES II. and III.—Children born without an anus.*

**M**R. JAMIESON, surgeon, in Kelfo, delivered a woman of twins, one female, the other male; the latter had no appearance of an anus; that part being equally firm and solid from the coccyx to the scrotum; he told the grand-mother, it was preternatural, and that though he had twice seen the anus covered by a membrane, which was easily cured, he could not promise to do the like in this; but if she pleased, he would try to reach the gut by incision, which she, with the mother's consent, fondly agreed to. Whereupon he made an incision pretty deep in the most reasonable part; then introduced his little finger to find the gut, but in vain. He afterward tried the trocar, but nothing followed but blood; so was obliged to leave the patient without prospect of help. The child died next day. Upon opening it, the rectum was entirely wanting, and the colon a perfect intestine cæcum, suspended loosely in the abdomen, and full of meconium.—From Med. Essays of Edinburgh, vol. iv. art. xxxii.

Mr. Pinkstan, surgeon, of London, delivered a woman of a female child. Next morning the nurse told him the child had had no stool, although she saw no fault at the fundament. On examining, and introducing a probe about half an inch, he met with a firm resistance. He then told the mother the necessity of performing an operation on the child; though not without expressing some doubt of success. Having obtained consent, he cut about half an inch into the resisting substance; and finding no feces follow, enlarged the external orifice, and went about half an inch deeper. Nothing issuing but a little blood, he introduced his finger, and found a resistance that made him despair of succeeding, and dressed up the wound. The child had that night stercoracious vomitings, that continued till its death, which happened on the fifth day. Being permitted to open the child, he found the rectum callous and imperforate, as far as the last vertebra

vertebra of the loins, which showed the defect was absolutely incurable. In cases, however, of this kind, a cure should always be attempted.

*C A S E IV.—The urethra imperforated.*

**M**R. LUCAS, of Pontefract, in Yorkshire, the day after delivering a woman, understood the child had never made water. Upon inspection, he found the glans penis imperforated, and of a bad formation, with scarce any prepuce, and no appearance of the urethra. On this he made an opening with a small lancet pretty deep along the penis, under the urethra, making crucial incisions; he also tried to pass a small probe, but all attempts were unsuccessful; a great hæmorrhage obliged him to desist; but in about twelve hours, the urine forced a passage through the semi-divided fibres into the artificial urethra formed by the punctures of the lancet, and the child soon recovered.—*Vide* Lamotte, book i. chap. xxx. on imperforation of the fundament and urethra.

*N U M B. I. C A S E I. II. and III.—Tongue-tied.*

**A** WOMAN whom I delivered, told me the child had got two tongues. I suspected what was the matter, but said nothing. When I examined, I found a large swelling under the tongue, and the pressure had flattened it to that appearance. To make the parents easy, I ordered a mixture with barley-water and mel. rosarum, and to moisten the part now and then with a feather, and told them the appearance would vanish in a few days; which prognostic was verified.—This swelling was occasioned by my finger, which I was obliged to introduce into the mouth in delivering the head.

Cases of the tongue being tied by a thin membrane, to the under part of the mouth, are common, and easily assisted. I have only had two cases in all my practice that appeared dangerous.—A poor woman brought her child to me, and told me it was tongue-tied, and could not suck. When I raised it up, I perceived, instead of a thin membrane, a very thick one, and something like an excrescence formed below, to which the under-part of the tongue adhered. I endeavoured to divide it slowly with a lancet armed, but as it bled a great deal I desisted, having heard of some fatal instances of the kind, though at second-hand only. I was uneasy at its bleeding so much, as I had divided so small a part, where no pressure could be made, or any certain vessel taken up. I wiped it frequently with a linen rag; but it continued to bleed. I sent for some pulv. stypt. but recollected that spirits of wine would contract small vessels, and immediately dipped a feather in some, and with it touched the divided vessels, which contracted in an instant. I made the woman stay some time, but the first touch was sufficient.

I had been assured by a surgeon, that he had brought down such an excrescence by touching it now and then with lunar caustic. I tried to relieve a child with that article, but there was so much moisture from the saliva in the mouth, that the caustic was dissolved, and affected the adjacent parts. I therefore discontinued it, as it did not remove the impediment.



## COLLECTION XLVII.

NUMB. I. CASES I. II. and III.—*Mould-shot heads and convulsions.*

[Vide Part i. Book iv. Chap. ii. Sect. iii.]

**I** WAS sent for to a child, who immediately after delivery was thrown into convulsive fits. The labour had been tedious, the child large, and the head compressed into a longish form. I tried with the palms of my hands to mould it into a globular shape, but to no purpose. I took about two ounces of blood from the neck, and ordered a small blister betwixt the shoulders. It had no return of convulsions after bleeding, and grew a strong healthy child. The head gradually expanded, and recovered a better form.

I delivered a woman whose child was large, the pelvis small, and the head of a very long shape; one parietal bone was squeezed over the other, and the occipital bone forced more back. The child, who cried strongly at first, was immediately after thrown into a convulsive fit. I tried to mould the bones into their proper form, but could not. The funis umbilicalis not being yet tried, I cut it, and allowed it to bleed about four spoonfuls. The child recovered. I ordered a blister, and three grains of rhubarb, to purge off the meconium. This method answered so well, that when the head was much squeezed, I commonly allowed a little blood to flow from the funis, before tying it tight. Some midwives give the child three drops of blood from the funis, to prevent convulsions, which custom might arise from some more knowing practitioner, who took this method in deceiving them, on purpose to let the navel-string bleed a little.—*Vide collect. xxxii. case xi.*

I was called to a child in convulsions soon after delivery. It seemed to be in a dying condition. I cut the ligature of the funis, and fomented it with warm water, but it would not bleed. The mother was against bleeding with a lancet. I ordered leeches to the neck, and a blister to the back; but before they could be applied, the infant expired.

No doubt it is right, when the head is squeezed in the pelvis to a wrong shape, to try to reduce it, though I never succeeded but once or twice at most, and then I ascribed the success to the head not having been long retained in the passage,

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NUMB. II. CASES I. II. III. and IV.—*Eruptions.*

**A** CHILD, about three days after delivery, struck out all over the body with small red eruptions, which, in London, the nurses call the *red-gum*; but in Scotland is termed the *bives*. As I found the child had got little passage, and had not sucked, I ordered three grains of rhubarb; and if it did not operate in five or six hours, to give three grains more; both doses were given, which assisted in discharging a large quantity of meconium. On the fourth day the mother suckled the child. The milk kept the belly sufficiently open, and, by degrees, carried off the complaint.

I was called to a child about eight days old (to be brought up by hand) who was broken out much the same as the former. It was also restless, and cried much. It had not above four times passage since the delivery. I ordered five grains of rhubarb in a little thin pap, which gave the child two loose stools, and relieved it of the colic pains. I directed the nurse to give frequently some chicken-broth for nourishment, either by itself, or mixed with the pap; and if the child did not go to stool two or three times a-day,

to dissolve half an ounce of manna in four spoonfuls of water, and give about a spoonful as often as there should be occasion, to have the above effect. The nurse had given oil of sweet almonds and syrup of violets, without effect; but the manna after the rhubarb, kept the body open, and the eruptions, in a few days, were entirely gone.

I was called to a child about five days after delivery, which had been very well till that morning; when, finding it bound, the nurse had given it some decoction of senna and prunes, which had thrown it into a violent purging; and this had carried in all the red-gum. I ordered julep. e creta, ℥ij. with tinct. thebaic. gt. iij.; a spoonful to be given presently, and repeated after every loose stool. This stopped the purging, and the eruptions resumed their red colour, and went off gradually.

I delivered a patient of a strong healthy boy. The mother was unable to suckle, from an inflammation coming on the breast. I advised the nurse to keep the child's body open, which she neglected. I was sent for on the sixth day, when I found the child in a violent fever; there had been very little passage, and its body was full of the red-gum; but to my great surprize, I found an erisipelas covering all the back and right side. I ordered ten grains of magnesia, and a clyster of chicken-broth, which brought off a large quantity of thick meconium. This plainly shewed the child had been neglected, but the inflammation soon turned livid, and destroyed the child.

## COLLECTION XLVIII.

[ Vide Part i. Book iv. Chap. ii. Sect. iv. and v. ]

### NUMB. I. CASES I. II. III. and IV.—*Green stools.*

A CHILD, put to a wet-nurse, was taken soon after with a continual crying and restlessness. When I visited it, at the desire of the parents, the nurse told me the stools were sometimes hard, at other times curdled and green; but by the child being much emaciated, I suspected the nurse had little or no milk. I touched the side of the mouth, when it gaped, and greedily sucked my finger. I desired the nurse to milk from her breast a little into a cup. She tried, but could not squeeze out one drop; and said the child had emptied her breasts just before I arrived. I said nothing to her, but advised the parents to take away the child before it was starved. I recommended another, who I was certain had a good breast. This advice they followed, which recruited the child, and carried off the green stools without the assistance of any medicine.—I could mention many cases of the same kind, where I have saved the infants, when called in time.—*Vide collect. i.*

A child that was suckled by the mother, near the end of the month was taken with gripings, and curdled green stools. I ordered six grains of rhubarb, and a mixture of half an ounce of magnesia, in two ounces of aq. pur. sweetened with sugar; a spoonful to be given night and morning. As the milk was rather too thick, and of a yellow tincture, I desired the nurse to give the child frequently a little chicken-broth, or beef-tea, as I found that her mistress was irregular in drinking spirits. The child grew better, but frequently relapsed, and I advised weaning it. My advice was followed, and the child recovered.

I was

I was called to a child about a month old, brought up by hand. It had been afflicted with green stools, and was brought very low by purgings. I ordered Aq. alexit. simp. ℥iij. Spirituous, ℥ss. Elect. e scordio, ℥ss. sweetened with syr. simp. a spoonful to be given after every stool; also a clyster made of the decoction of chicken-guts. For nourishment, chicken-broth in which rice was boiled. This method restrained the purging and strengthened the infant.—In a few days the looseness returned; I ordered eight grains of toasted rhubarb and three grains of toasted nutmeg, and, in twelve hours after, the above mixture; they answered the purpose.—In many such cases I have succeeded; but when we are called too late, the child is generally lost.

I was called to a child four months old, who had been three weeks much in the above case, but all the methods had been unsuccessfully tried, as recommended in part i. The child being opened soon after it expired, I found all the glands of the mesentery swelled and in hard knots,

#### NUMB. II. CASES I. II, and III.—*Aphthæ, or thrush.*

I WAS desired to visit a child at wet-nurse, and told, that its lips, mouth, throat, and tongue, were full of little white spots inclining to yellow. The child was about a fortnight old, had caught cold, had been costive, and the stools of a clay colour; but afterwards taken with loose, curdly, green stools. The skin felt hot, the pulse was quick and low. I found the nurse's milk in plenty, and of a right consistence. I desired her to give the child frequently a little chicken broth; to wash the mouth gently and often with a linen rag dipped in a gargle of barley-water and mel rosarum; also to give breast-milk, milked in the child's boat. I ordered some doses of the pulv. e chel. cancror. comp. gr. v. Rhubarb. gr. i. to be given with the broth night and morning, and a blister to be applied between the shoulders. Next day, the nurse told me she had got down pretty often the milk and broth, but not the powders; but that now the child's throat was so sore that she could get down neither. The appearance of the thrush and stools was much the same. I examined the anus, and found a few spots. I desired the nurse to give the child a clyster of chicken-broth, or a decoction of chicken-guts, every four hours, to try to nourish it in that manner. Next day the thrush began to slough off the tongue. She continued the clysters. The day after, she got down some milk and broth at different times. The thrush was now more at the fundament, and so sore the clysters were left off. After this the excrements were less curdled and green, and not so frequent; the thrush went off, and the child recovered. I have had many such cases; but the children seldom recovered when the thrush rose to such a height. *Vide* part i. on this subject.

I was called to a child about five months old, which had been healthy till within a month before I was called. It was taken with a sore mouth, full of little white spots, which by degrees turned to yellow and changed to a dusky colour. It could not suck, but was supported with new-drawn whey, pap, and new milk. It was much emaciated; the stools were loose, of a brown colour, and cadaverous smell. The gums and throat were black and full of gangrenous ulcers. I told the parents the child was in the utmost danger, and could not live long. This was late at night, and it expired before morning.

Some time after, I was called to a child about two years old, in whom the appearance of the mouth was much the same, and the disorder of the same duration. The gums were mortified; and the child soon expired.

These



These last cases are not so proper to insert here, because I confine myself to those in the mouth, but as they are of the same kind, and so extraordinary from their long continuance, I thought they might show the danger that ensues when the patient is not assisted in time. Consult Dr. Fothergill and others on those disorders.

## COLLECTION XLIX.

[Vide Part i. Book iv. Chap. iii.]

*CASE I.—With respect to men-practitioners.*

**M**R. W. attended a woman in labour of her first child. He had gained reputation from being called to assist midwives in the country in preternatural cases; but as this was the first time of his being bespoke to attend by himself, he was at a loss how to manage his patient in a natural case. The woman was of a healthy and robust constitution, the labour-pains were frequent and strong; but he, not considering the parts must have time to soften and dilate, began, as he had formerly done in preternatural cases, to lubricate and dilate the os uteri, which was then only open about the breadth of a crown-piece. In this manner he continued, every now and then, to assist the delivery for several hours to no purpose. The nurse, who had been many years in that business, exhorted him to rest, and not fatigue himself, especially as the woman was not young, and as the child presented with the head.

He had attended me one course of lectures about three years before, but had not attended the labours, imagining every thing in midwifery trifling, and that the lectures on the extraordinary cases were sufficient.—Finding himself at a loss how to manage the labour, he desired her friends to send for me; but, contrary to his inclination, another gentleman was called, who by art and cunning had got a name amongst the lower sort of patients. Both these gentlemen being self-sufficient, soon split in their opinions, as to the presentation of the fœtus. He who came last, alledged the shoulder presented, the other still insisted that it was the head. These debates luckily happened in another room; and continued so obstinate and long, that the patient, who had been fatigued most of the night, fell into a sound sleep; being at rest from her premature assistant. The nurse, being afraid that her mistress would suffer from these disagreements, advised the husband to call an old practitioner. As I returned from a patient about six in the morning, the husband was advising with his neighbour, who knew me, and begged my advice and assistance. I complied, and accompanied him to his house. After hearing the different parties, both male and female, I, as the patient was asleep, desired she might be kept quiet. As the season was excessively cold, I begged they would regale the attendants and me with some warm tea; hoping I might have time to soothe the quarrel, for the females, who were numerous, had entered into the dispute. At their desire, I examined the patient in time of a pain, and found the os uteri a little open, but rigid. From the globular form and hardness of what presented, I imagined it rather the head than any other part of the fœtus, resting on the upper part of the ossa pubis. I then called the gentlemen aside, and observed that the position of the child was of no consequence at present; that the woman being now easier, this her first child, the os uteri rigid, and

the membranes not broken, it would be better to encourage rest, and allow time for the parts to soften and stretch gradually by the pushing down of the membranes and waters. I said, if the head presented, it would probably advance; if the shoulder, it would be time enough to assist when there was more room, especially as the waters were not yet come off. By this remonstrance I brought them to a better temper, and they were at last reconciled. Indeed I thought it always my duty to make up such breaches for the general good of society, as well as for the honour of the profession.—I advised Mr. W. to attend his patient, but not to disturb her in the least; and proposed that we should all three meet at twelve, or sooner if he desired. We were called at ten, but on examining, I found little alteration, only the os uteri felt a little softer. It was then agreed, that as her pulse was quick, she should lose eight ounces of blood from the arm; that the nurse should administer a clyster, and after the operation give the patient a draught with 30 drops of the tinct. thebaic. These medicines had the desired effect; and Mr. W. delivered, or rather received the child, presenting fair, next morning.

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### C A S E II.

**I** RECEIVED a message from a lady, to go to one who had been her servant, and was married to a tradesman. On my arrival, I found another practitioner there, who seemed much surprized, and with a surly countenance scolded the husband for bringing another without his knowledge. As I did not know another of the profession was there when I was called, I asked the gentleman's pardon, and told him the message I had received, and my ignorance of any other being there but a midwife. The husband excused himself in saying, it was the lady's goodness to save his wife. This apology seemed to pacify him, but he began to abuse the ignorance of all midwives, and he said he was bespoken, and would not be concerned with any such gossips. I told him I was sorry my coming should give him any uneasiness, but begged he would tell me how his patient was, that I might inform the lady. By this calm reasoning his surly aspect unbended. He told me he was just going to deliver his patient, and I was welcome to be present at the operation; for he could wait no longer, as he had already lost one patient by waiting two days on this. I thanked him for his invitation; but begged only he would grant my first request. He then gave me to understand, that the night before last the woman had strong pains; but as he was then uncertain how the child presented, and she had got little sleep for two nights before, he had ordered repeated doses of opium, which had produced no effect; but that last night she had been quite stupid and often convulsed; and that nothing could save her life but present delivery. He also told me the membranes were not broken, but the mouth of the womb was pretty largely open; and desired me to examine, which having done, I found the head of the fetus resting above the ossa pubis; a circumstance which he had not observed. As he had occasion to withdraw, the apothecary informed me, the patient had taken at different times, about 15 grains of opium; and this, he persuaded himself, was the occasion of the convulsions and stupidity. I found her pulse quick and full, while she lay in a profound sleep. The nurse told me, for several hours she had been very quiet. When the gentleman returned, I told him his account was very right, and if he would now examine, he would find the head resting above the pubes. This he thought impossible, as he had examined so lately, but

on trying, he confessed it was even so. I likewise told him her pulse was still strong, and as she had fallen into a sound sleep, advised him to have a little patience. He now seemed more disposed to reason. I therefore observed to him, that as this was not barely a case in midwifery, considering the stupidity and convulsions, it would be proper, for the safety of all concerned, and to prevent reflections, that the husband should go and beg of the lady to send her own physician to our assistance. He assented to this, and the physician came. At his arrival, being desired for information in every particular, and enquiring minutely about the quantity of opium which had been administered, the man-midwife and the apothecary disagreed in their accounts; when this last went home to bring the bills, the other declared he was obliged to go to another patient, and therefore would leave the patient to my care. I told him I was engaged also, and begged he would attend his patient. The physician told him, if the woman was kept quiet, she would sleep off her large dose of opium. This declaration enraged him so much, that he left the house, muttering revenge against the apothecary.

After some conversation with the physician, we both concluded that the over dose of opium was the occasion of the convulsions and stupidity, and that as the effect went off, her pains would come on. We then sent for a midwife, who attended the case, and informed me afterwards, that the woman was safely delivered that night of a dead child; but she recovered very well.

#### NUMB. II. CASES I. II. and III.—Midwifery.

**W**HEN midwifery came to be more practised by gentlemen than formerly, one Dr. C——, visited all the midwives, and left printed notes of his abode. He was called by a midwife at Lambeth; but the woman was delivered before he arrived; nevertheless, he would examine, and called out that the woman was tore, which the midwife denied, complaining loudly of his unfair conduct, as she had called him. Unluckily for this novice, the same accident, to a much greater degree, happened to himself a little after, in the very patient that Dr. Simpson called me to. *Vide col. xl. N<sup>o</sup> vi.*—The midwife heard of this incident; on which she every where upbraided him with being guilty of what he had villainously and falsely laid to her charge.

Another gentleman, many years ago, made a great bustle, got into a considerable share of practice by taking low prices. He abused the midwives, right or wrong, and was abused by them. Frequently, instead of waiting in lingering cases, where the head presented right, he turned the child, and brought it by the feet; by which method both mother and child were often lost. Nevertheless he gained credit by making cases appear desperate to those concerned. These practices frightened many midwives from calling in men-practitioners. To my knowledge he was the occasion of many bad cases, this the midwives have acknowledged to me when I expostulated with them for not calling me sooner. Such behaviour in the end sunk his business. Several of his better sort of patients were delivered by other gentlemen, and finding themselves and their children saved, never more had recourse to him.

I was one night called to a woman, and was not a little surprized when I came to hear two women scolding in a ferocious manner, and ready to come to blows. I soon found they were two midwives of my acquaintance. One was sitting at the bed-side and desired me to take a pain, saying she



would yield her seat to me, but to no midwife in London. I examined, and then desired them both to go into the next room, where I heard that one had been bespoke, but was engaged when sent for; on which the other was called. I again went to the patient, and told her she was in a very good way, and asked which of them she chose for her midwife? She said the one who was bespoke; for the other she was afraid of. I acquainted them with this decision; and advised her that came first to yield, for if any accident should happen, she would be blamed; and told her she should be paid for her trouble. Thus ended the contest, and both were pleased.—  
*Vide collect. xxxii. case xiii. also collect. xxxiv. N<sup>o</sup> i. case xiv. N<sup>o</sup> ii. case iii. and viii. and collect. xxxiii. N<sup>o</sup> ii. case v.*

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